DENON

For U.S.A., Canada, Europe & Japan model

SERVICE MANUAL

MODEL DVD-5900
DVD-A11

DVD AUDIO-VIDEO / SUPER AUDIO CD PLAYER

注 意

サービスをおこなう前に、このサービスマニュアルを必ずお読みください。本機は、火災、感電、けがなどに対する安全性を確保するために、さまざまな配慮をおこなっており、また法的には「電気用品安全法」にもとづき、所定の許可を得て製造されております。従ってサービスをおこなう際は、これらの安全性が維持されるよう、このサービスマニュアルに記載されている注意事項を必ずお守りください。

- For purposes of improvement, specifications and design are subject to change without notice.
- 本機の仕様は性能改良のため、予告なく変更することがあります。
- 補修用性能部品の保有期間は、製造打切後 8年です。

- Please use this service manual with referring to the operating instructions without fail.
- 修理の際は、必ず取扱説明書を参照の上、作業を行ってください。

- Some illustrations using in this service manual are slightly different from the actual set.
- 本文中に使用しているイラストは、説明の都合上現物と多少異なる場合があります。

DENON, Ltd.

16-11, YUSHIMA 3-CHOME, BUNKYOU-KU, TOKYO 113-0034 JAPAN

X0176V.01 DE/CDM 0309

SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

LEAKAGE CURRENT CHECK

Before returning the unit to the customer, make sure you make either (1) a leakage current check or (2) a line to chassis resistance check. If the leakage current exceeds 0.5 milliamps, or if the resistance from chassis to either side of the power cord is less than 460 kohms, the unit is defective.

LASER RADIATION

Do not stare into beam or view directly with optical instruments, class 3A laser product.

注　意　サービス、点検時には次のことにご注意願います。

◉注意事項をお守りください！
サービスのとき特に注意を必要とする個所については、キャビネット、部品、シャーシなどにラベルや捺印で、注意事項を表示しています。これらの注意書きおよび取扱説明書などの注意事項を必ずお守りください。

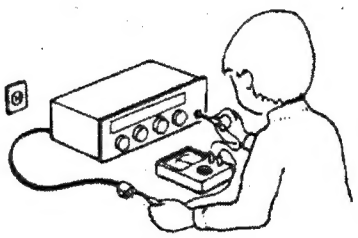
◉感電に注意！
(1) このセットは、交流電圧が印加されていますので、通電時に内部金属部に触れると感電することがあります。従って通電サービス時には、絶縁トランスの使用や手袋の着用、部品交換には、電源プラグを抜くなどして、感電にご注意ください。
(2) 内部には、高電圧の部分がありますので、通電時の取扱には、十分ご注意ください。

◉指定部品の使用！
セットの部品は難燃性や耐電圧など安全上の特性を持ったものとなっています。従って交換部品は、使用されていたものと同じ特性の部品を使用してください。特に配線図、部品表に⚠印で指定されている安全上重要な部品は必ず指定のものをご使用ください。

◉部品の取付けや配線の引きまわしは、元どおりに！
安全上、テープやチューブなどの絶縁材料を使用したり、プリント基板から浮かして取付けた部品があります。また内部配線は引きまわしやクランパーによって発熱部品や高圧部品に接近しないように配慮されていますので、これらは必ず元どおりにしてください。

◉サービス後は安全点検を！
サービスのために取り外したねじ、部品、配線などが元どおりになっているか、またサービスした個所の周辺を劣化させてしまったところがないかなどを点検し、外部金属端子部と、電源プラグの刃の間の絶縁チェックをおこなうなど、安全性が確保されていることを確認してください。

（絶縁チェックの方法）
電源コンセントから電源プラグを抜き、アンテナや、プラグなどを外し、電源スイッチを入れます。500V絶縁抵抗計を用いて、電源プラグのそれぞれの端子と、外部露出金属部〔アンテナ端子、ヘッドホン端子、マイク端子、入力端子など〕との間で、絶縁抵抗値が1MΩ以上であること、この値以下のときは、セットの点検修理が必要です。



注　意　安全上重要な部品について

本機に使用している多くの電気部品、および機構部品は安全上、特別な特性を持っています。この特性はほとんどの場合、外観では判別つきにくく、また、もとの部品より高い定格（定格電力、耐圧）を持ったものを使用しても安全性が維持されるとは、限りません。安全上の特性を持った部品は、このサービスマニュアルの配線図、部品表につぎのように表示していますので、必ず指定されている部品番号のものを使用願います。

(1)配線図… ⚠マークで表示しています。

(2)部品表… ⚠マークで表示しています。
指定された部品と異なるものを使用した場合には、感電、火災などの危険を生じる恐れがあります。

WIRE ARRANGEMENT

If wire bundles are untied or moved to perform adjustment or parts replacement etc.,be sure to rearrange them neatly as they were originally bundled or placed afterward. Otherwise, incorrect arrangement can be a cause of noise generation.

Wire arrangement viewed from the top

ワイヤー整形図

調整や部品の交換等により、ワイヤー類の結束をはずしたり移動させた場合には、それらの作業が完了した時点でワイヤーの整形をおこなってください。正しく整形されていないとノイズ発生の原因となることがあります。

上面からみたワイヤー整形

DISASSEMBLY

(Follow the procedure below in reverse order when reassembling.)

各部のはずしかた

（組み立てるときは、逆の順序で行ってください。）

1. Top Cover

（1） Remove 8 screws on the top and both sides , and 3 screws on the rear .

（2） Widen the Top Cover a little laterally , then detach it with sliding in the arrow direction .

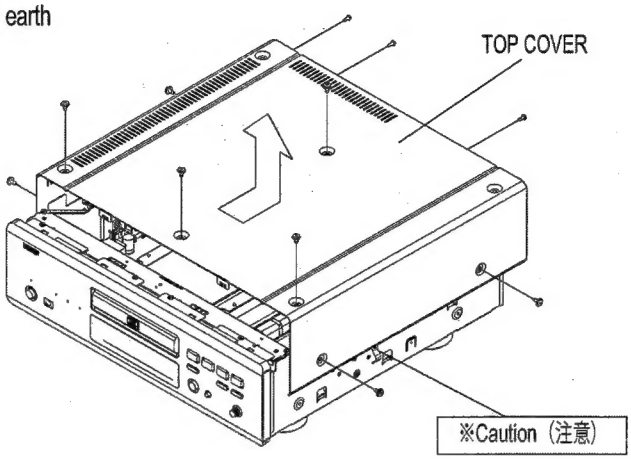
※ Caution : E3(North America) have earth bracket on the both center .

1. トップカバーの外し方

（1）側面及び上面からネジ８本、背面からネジ３本を外します。

（2）左右へ少し広げ、矢印の方向へずらしながら、外します。

※Ｅ３（北米）仕様では、中央部にアース板金有。取扱い注意の事。



2. Front Panel & Loader Panel

2.1. When the Disc Tray can be ejected electrically .

（1） Switch on , and press "OPEN/CLOSE" button to open the Disc Tray .

（2） Detach the Loader Panel by lifting int the arrow direction .

（3） Cloese the Disc Tray .

（4） Disconnect the wire [CY025][CX035][CX172] connecting from the Front Panel .

（5） Demove 4 top screws and 4 bottom screws , then detach the Front Panel to the arrow dirrection ,

2.2. When the Disc Tray cannot be ejected electrically

（1） Insert a ruler into the left hole of DVD Mecha and push the Plate Gear of the DVD Mecha , to open the Disc Tray .

（2） The same steps described on 2.1.（2）～（5）.

2. フロントパネル、ローダーパネルの外し方

2．1．ディスクトレイが電動でオープン出来る場合

（1）電源を入れて、「ＯＰＥＮ／ＣＬＯＳＥ」ボタンを押して、ディスクトレーを開きます。

（2）ローダーパネルを矢印方向へ持ち上げて外します。

（3）ローダーを閉じます。

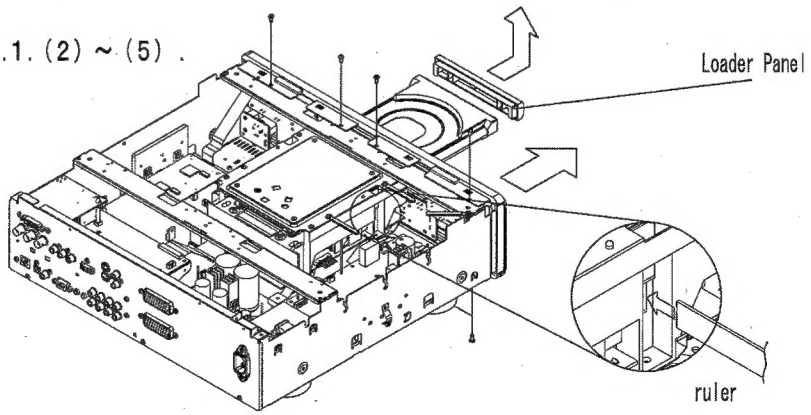
（4）フロントパネルからのワイヤー[CY025][CX035][CX172]を外します。

（5）上からネジ４本、下からネジ４本を外し、フロントパネルを矢印方向へ外します。

2．2．ディスクトレーが電動でオープン出来ない場合

（1）メカユニット左前のスリットに、定規等を入れプレートギアを押してローダートレイを開きます。

（2）2．1．（2）～（5）の作業に同じ。

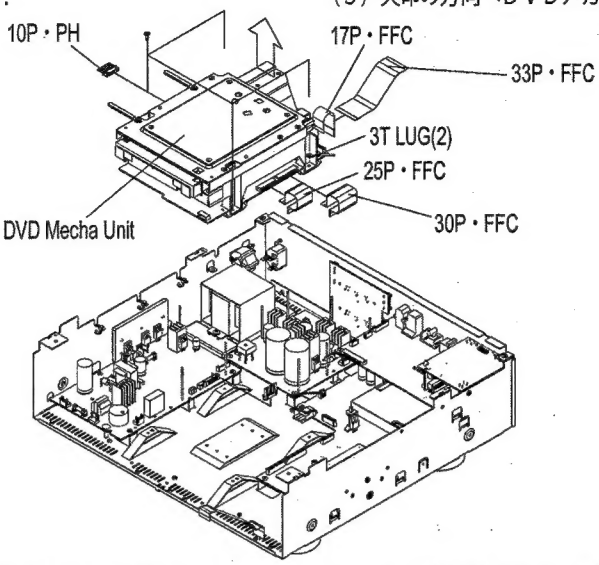


3． Dvd Mecha Unit

（1） Remove 4 screws on the top side ,
（2） Disconnect [CY101][CY171][CY251][CY301][CX331] , from the MAIN P.W.B. .
（3） Take it off in the arrow direction .

3．ＤＶＤメカユニットの外し方

（1）上面からネジ４本を外します。
（2）メイン基板から、[CY101][CY171][CY251][CY301][CX331] のワイヤーを外します。
（3）矢印の方向へＤＶＤメカユニットを外します。

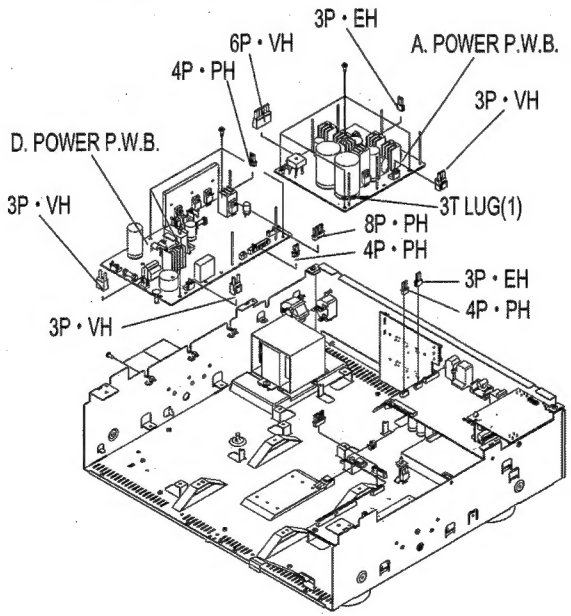


4． D.POWER P.W.B. & A.POWER P.W.B.

4.1． D.POWER P.W.B.
（1） Remove 4 screws on the top and 3 (or 2) screws on the side ,
（2） Disconnect [CX024][CX026][CX036][CX042][CX081] , from the D.POWER P.W.B. and take off it upside .
4.2． A.POWER P.W.B.
（1） Remove 4 screws on the top side .
（2） Disconnect [CY032][CX034][CX062] from A.POWER P.W.B. and [CX031] from VIDEO P.W.B. and take off it .

4．D.電源基板とA.電源基板の外し方

4．1．D.電源基板の外し方
（1）上面からネジ４本と側面からネジ３（又は２）本を外します。
（2）D.電源基板から、[CX024][CX026][CX036][CX042][CX081] のワイヤーを外します。
4．2．A.電源基板の外し方
（1）上面からネジ４本を外します。
（2）A.電源基板から、[CY032][CX034][CX062]とビデオ基板から [CX031]のワイヤーを外し、上へ外します。



5． Video P.W.B. & Scart P.W.B.

5.1. Video P.W.B.

（1） Remove 10 (Japan : 11) screws on the rear and 1 screw on the side and 2 screws on the top .

5.2. Scart P.W.B.

（1） Remove 4 screws on the rear side ,

（2） Disconect [CX031][XX052][CY102] from Scart P.W.B. .

5．ビデオ基板とスカート基板の外し方

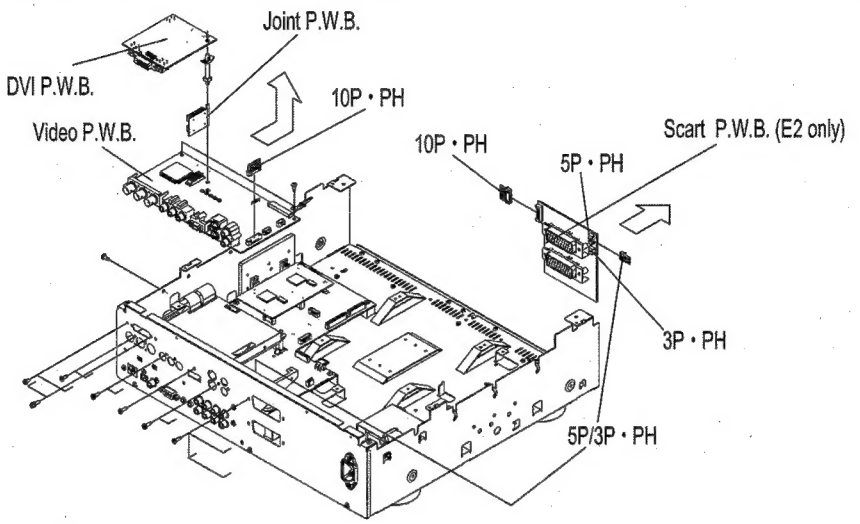
5．1．ビデオ基板の外し方

（1）背面からネジ１０（国内のみ１１）本と側面からのネジ１本と上面からのネジ２本を外します。

5．2．スカート基板（Ｅ２のみ）の外し方

（1）背面からネジ４本を外します。

（2）スカート基板からの[CX031][CX052][CY102]を外します。



6． IEEE1394 Unit & Audio P.W.B.

6.1. IEEE1394 Unit

（1） Remove 2 screws on the rear and 1 screw on the top .

（2） Disconect [CY191][CY173] from the IEEE1394 Unit .

6.2. Audio P.W.B.

（1） Remove 7 screws on the rear and 4 screws on the top .

6．ＩＥＥＥ１３９４ユニットとオーディオ基板の外し方

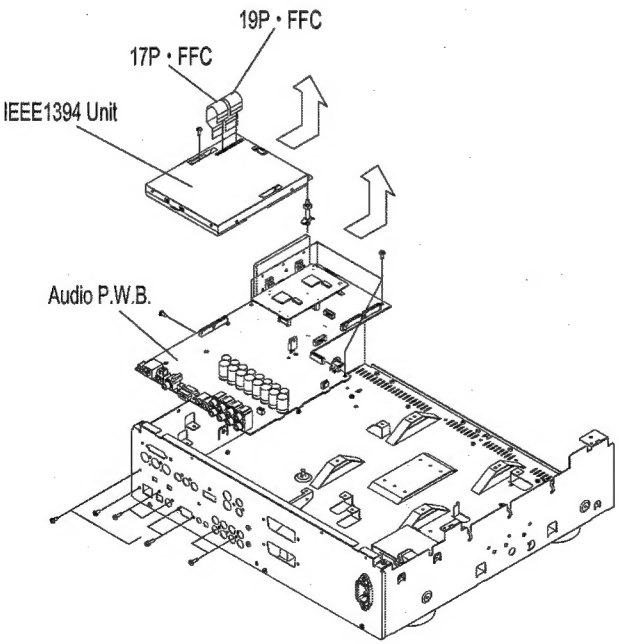
6．1．ＩＥＥＥ１３９４ユニットの外し方

（1）背面からネジ２本と上面からのネジ１本を外します。

（2）ＩＥＥＥ１３９４ユニットからの[CY191][CY173]を外します。

6．2．オーディオ基板の外し方

（1）背面からネジ７本と側面からのネジ１（又は２）本、上面からのネジ４本を外します。



7. Power Trans & Rear Panel

7.1. Power Trans

（1） Remove 2 (Japan : 4) screws on the top .

7.2. Rear Panel

（1） Remove 2 screws on the top and 3 screws on the rear .

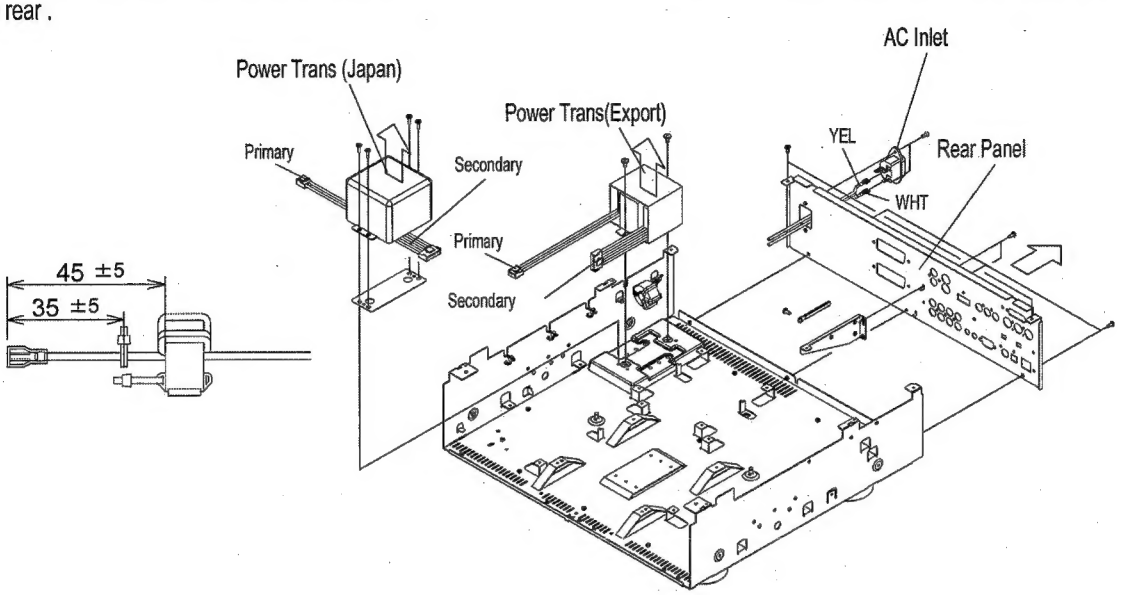
7．パワートランスとリアパネルの外し方

7．1．パワートランスの外し方

（1）上面からネジ2（国内のみ4）本を外します。

7．2．リアパネルの外し方

（1）上面からネジ2本と背面からネジ3本を外します。



8. Parts on Front Panel

8.1. Display P.W.B.

（1） Remove 11 screws on the top .

8.2. Led P.W.B.

（1） Remove 2 screws on the top .

8.3. Encoder P.W.B.

（1） Remove 2 screws on the top .

8.4. P.SW P.W.B.

（1） Remove 2 screws on the top .

8．フロントパネルの取付部品の外し方

8．1．ディスプレイ基板の外し方

（1）上面からネジ11本を外します。

8．2．LED基板の外し方

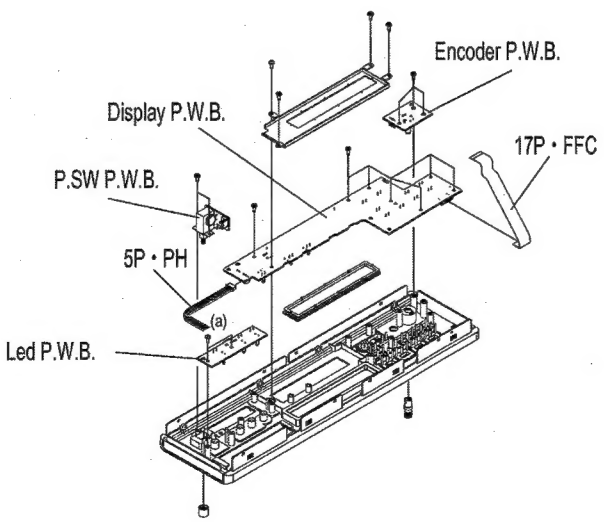
（1）上面からネジ2本を外します。

8．3．エンコーダー基板の外し方

（1）上面からネジ3本を外します。

8．4．P．SW基板の外し方

（1）上面からネジ2本を外します。



Iop Measurement (Judging for Traverse Unit Replacement)

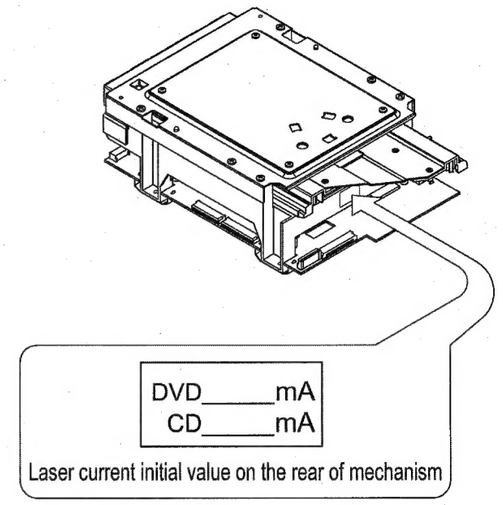
As to deciding whether optical pickup is defect or not (for replacing traverse unit), follow the steps below.

1. Judging Step

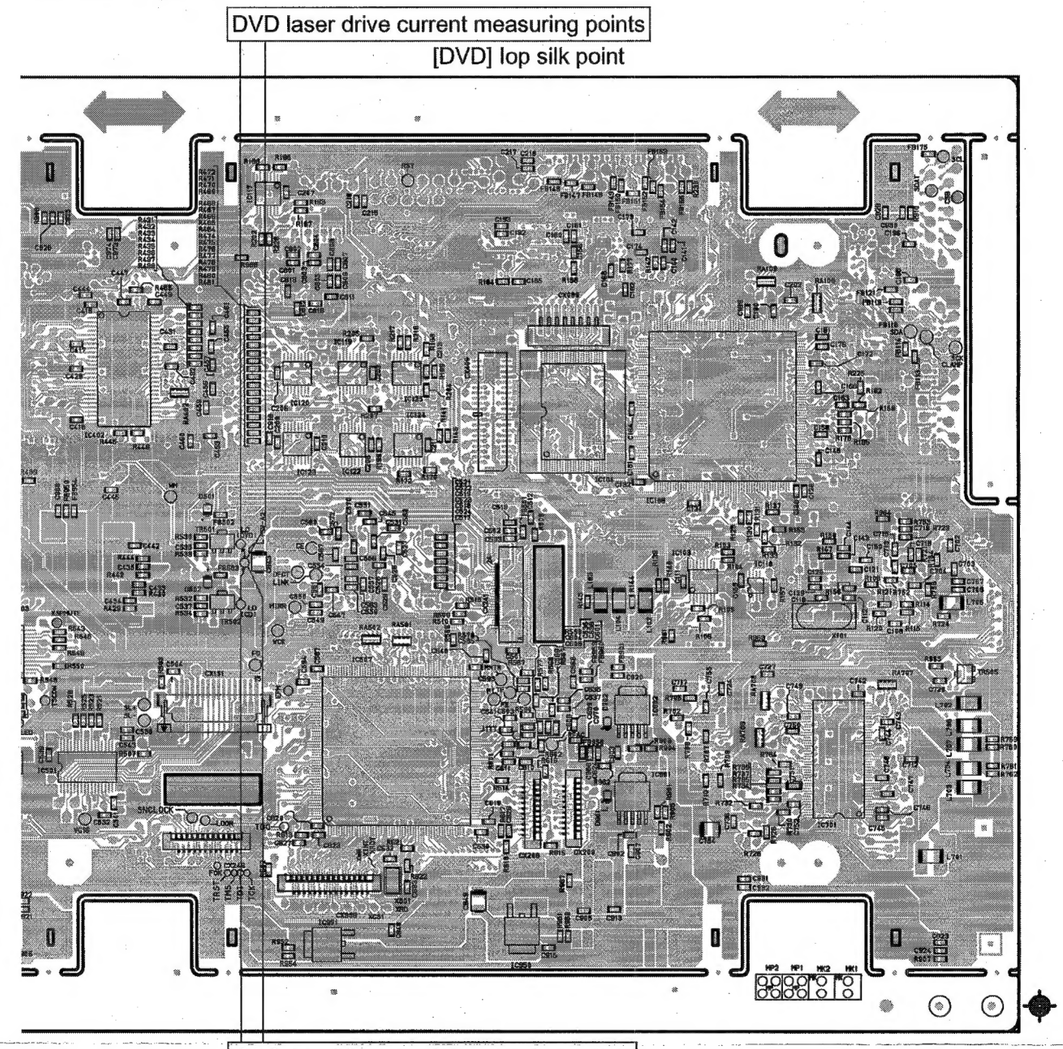
(1) Disc play abnormal
Problems such as disc no read, unsteady playback, etc.

(2) Laser drive current (Iop) check
Check Iop according to the measuring method described in step 2 below.
If the checked value is 1.5 times or more than the initial Iop indicated on the rear of mechanism unit, the traverse unit should be replaced.

(3) Replacing traverse unit
Referring to "How to Replace Traverse Unit", replace the traverse unit.
No mechanism adjustment is required as the whole unit is replaced with a new one.



2. Iop Measuring Method



GU-3512 P.W.B. (foil side)

(1) DVD laser drive current measurement
- Playback the title-1/chapter-1 of DVDT-S01 or commercially available DVD disc.
- Connect an oscilloscope to the test point above and measure the voltage.
- DVD laser drive current is calculated by:

  Iop = Measured Voltage Value / 14 (Resistance Value)

(2) CD laser drive current measurement
- Playback the track-1 of TCD-784 or commercially available CD disc.
- Connect an oscilloscope to the test point above and measure the voltage.
- CD laser drive current is calculated by:

  Iop = Measured Voltage Value / 12 (Resistance Value)

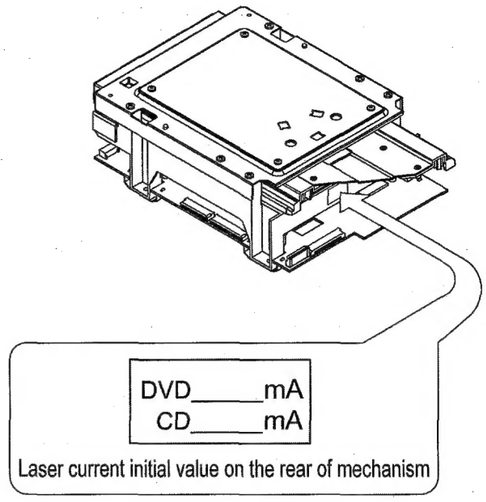
Iop 測定（トラバースユニット交換判定）

光ピックアップの故障（トラバースユニットの交換）判定は、下記の手順で行ってください。

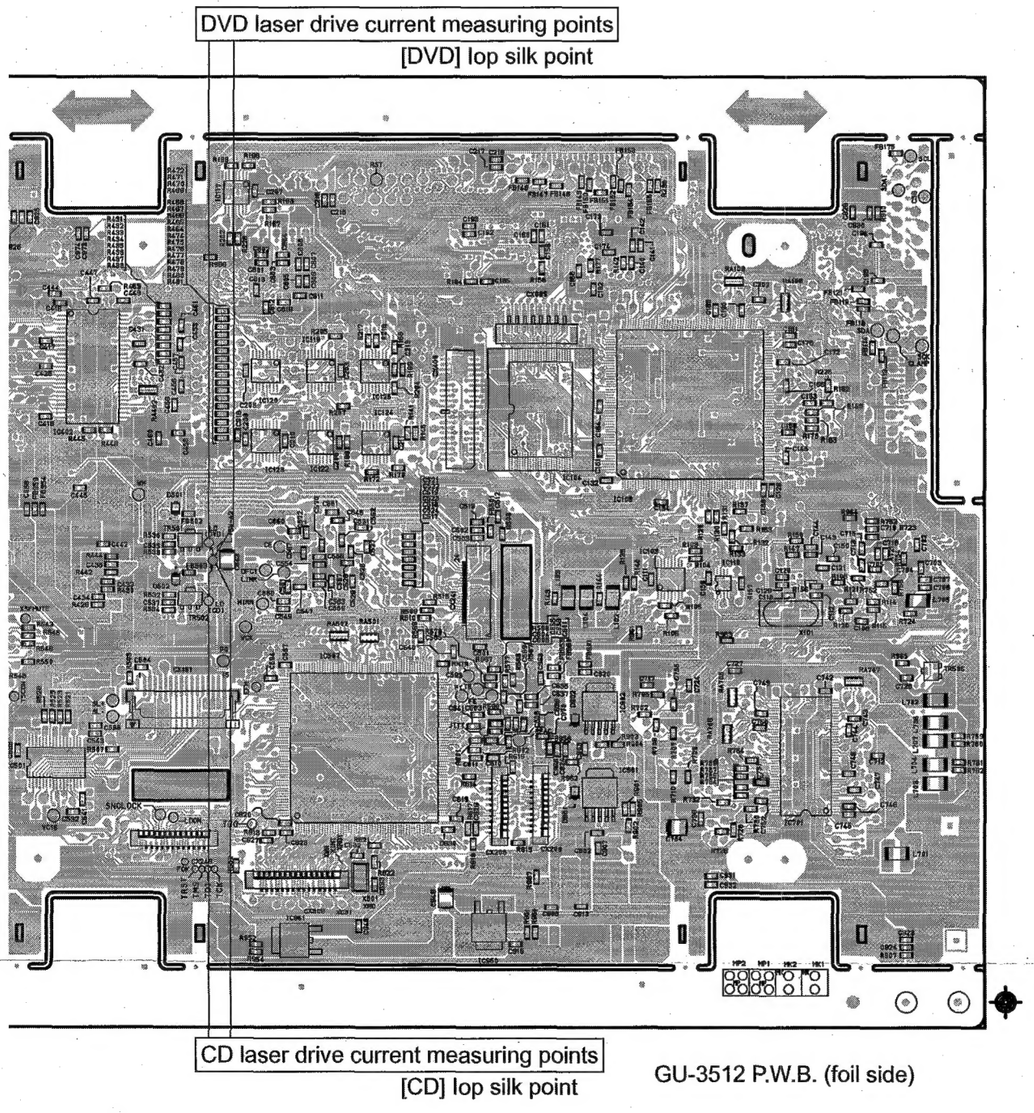
1. 判定手順
   (1) ディスク再生不具合
   ディスクを読み込まない、スムーズに再生しない等の不具合発生

   (2) レーザー駆動電流（Iop）の確認
   下記、2 項の Iop 測定方法に従い電流値を確認する。
   メカ背面のレーザー電流初期値の 1.5 倍以上になっている場合は、トラバースユニット交換の目安となります。

   (3) トラバースユニット交換
   「トラバースユニットのはずしかた」を参照して、トラバースユニットを交換します。
   トラバースユニット単位での交換となりますので、メカ部の調整は不要です。



2. Iop の測定方法



(1) DVD レーザー駆動電流の測定
・DVDT-S01 または市販 DVD ディスクのタイトル 1・チャプター 1 を再生する。
・上記テストポイントをオシロスコープに接続し、電圧値を測定する。
・DVD レーザー駆動電流値　＝「測定した電圧値」／「14（合成抵抗値）」

(2) CD レーザー駆動電流の測定
・TCD-784 または同等市販 CD ディスクのトラック 1 を再生する。
・上記テストポイントをオシロスコープに接続し、電圧値を測定する。
・CD レーザー駆動電流値　＝「測定した電圧値」／「12（合成抵抗値）」

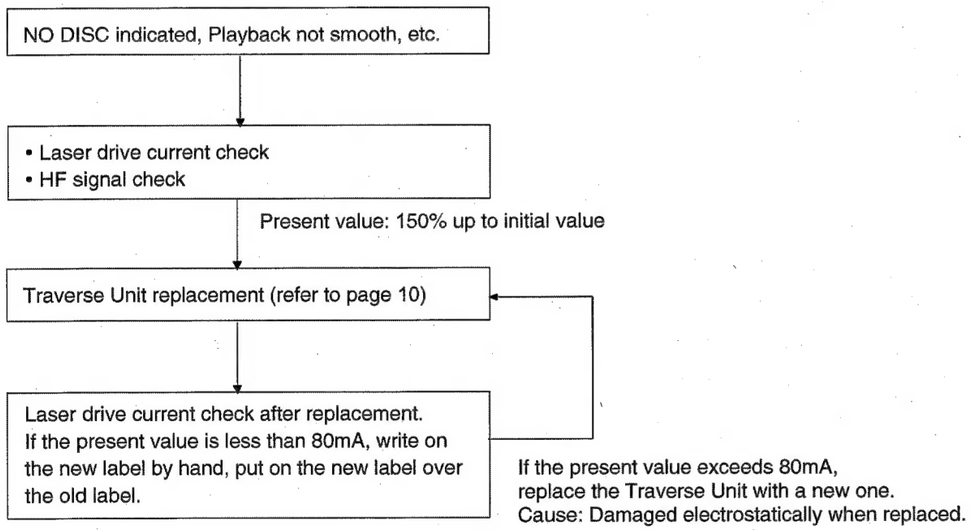
DIAGNOSTICS OF OPTICAL PICKUP AND REPLACING TRAVERSE UNIT

1. Note for Handling the Laser Pick-up

The protection for the damage of laser diode.
If you want to change the optical device unit from any other units, you must keep the following.
(1) It should be done at the desk already took measures the static electricity in care of removing the OPU's (Optical device unit) connector cable.
(2) Workers should be put on the "Earth Band".
(3) It shold be done to add the solder to the short land to prevent the broken Laser diode before removing the 24P FFC cable.
(4) Don't touch OPU's connector parts carelessly.

2. Optical Pick-up Diagnostics and Replacement

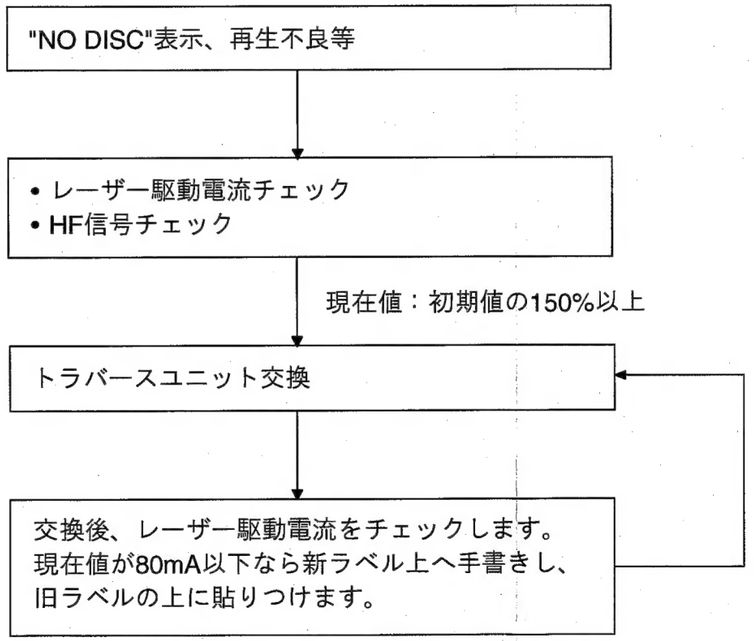
When repairing, carry out failure diagnostics by following the procedure described below.
If the present value of the laser drive current is 150% up to initial value, it is the point of the pickup replacement.
In case of the pickup replacement, replace the Traverse Unit with no adjustment.
The initial value is indicated on the label on back side of Mecha.



光ピックアップ取扱注意と交換

1. 光ピックアップの取扱注意
レーザーダイオードの破壊防止。
光素子ユニットを交換するときは、以下を遵守してください。
(1) 光素子ユニットの接続ケーブルをはずすときは、静電対策を行ったデスクの上で作業をしてください。
(2) 作業者はリストストラップを使用してください。
(3) レーザーダイオードの破壊防止のため、24 P FFCケーブルをはずす前にランドを半田付けショートしてください。
(4) 光素子ユニットのコネクタ部に触れないでください。

2. トラバースユニットの交換
交換時、以下の手順で故障診断をおこなってください。
- レーザー駆動電流の現在値が初期値の150%以上なら、ピックアップを交換してください。
ピックアップ交換の場合はトラバースユニットを交換し、調整は不要です。初期値はメカ後部のラベルに表示されています。



※現在値が80mA以上なら、再度トラバースユニットを交換してください。
原因： 交換時、静電破壊された。

How to Replace Traverse Unit

1. Preparing for Replacement

(1) Removing Clamp Base Damper
Remove 4 pcs of 2.6mm machine screw (a), and detach the Clamp Base Damper upward.

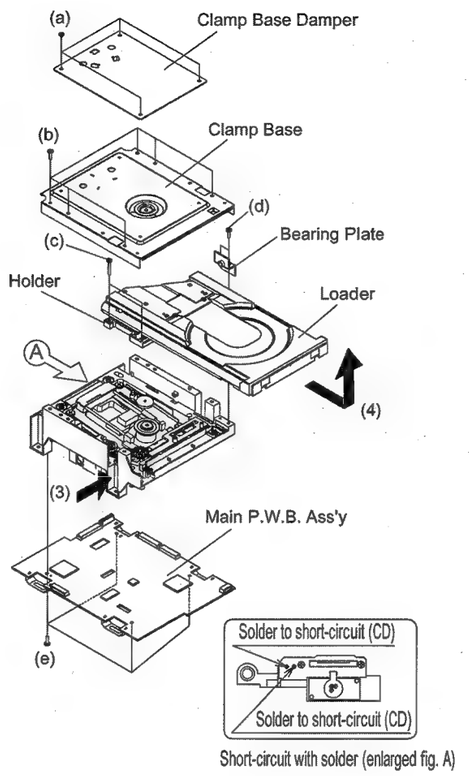
(2) Removing Clamp Base
Remove 6 pcs of 3mm P-tight screw (b), and detach the Clamp Base upward.

(3) Ejecting Loader
Through the left rectangular hole of the Mechanism Unit, push the slider with a ruler or driver until the Traverse portion lowers and the Loader comes out a little.

(4) Removing Loader
- Remove 2 pcs of 3mm P-tight screw (c) on the Loader Holder left.
- Remove 2 pcs of 3mm P-tight screw (d) on the Loader Holder right, then pull up the Bearing Plate.
- Fully pull out the Loader forward, and lift up to take it out.

(5) Shorting Pickup
To protect the Pickup from static electricity, short-circuit 2 positions as shown in figure.

(6) Removing Main P.W.B. Ass'y
Remove 4 pcs of 3mm P-tight screw (e), and detach the Main P.W.B. Ass'y downward.



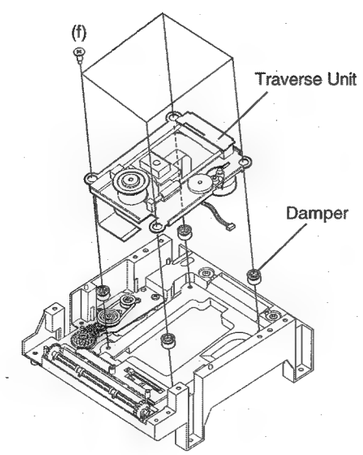
Short-circuit with solder (enlarged fig. A)

2. Replacing Traverse Unit

(1) Removing Wires
- CX241: 24P-FFC for Pickup
- CX151: 15P-FFC for Spindle
- CX031: 3P-PH wire for PU Slide

(2) Removing Traverse Unit
Remove 4 pcs of special screw (f) and dampers, then take out the Traverse Unit upward.

(3) Mounting Traverse Unit
Mount the Traverse Unit following the reverse order.



トラバースユニットの交換方法

1. トラバースユニット交換準備

(1) クランプベースダンパーのはずしかた
2.6mmマシンネジ(a)4本をはずして、クランプベースダンパーを上へはずします。

(2) クランプベースのはずしかた
3mmPタイトネジ(b)6本をはずして、クランプベースを上へはずします。

(3) ローダーを開く
メカユニットの左側角孔より、スライダーを定規やドライバーでトラバース部が下がってローダーが少し開くまで押します。

(4) ローダーのはずしかた
- ローダー左のホルダー部より3mmPタイトネジ(c)2本をはずします。
- ローダー右側より3mmPタイトネジ(d)2本をはずし、ベアリングプレートを上へはずします。
- ローダーを前面へ引出し、止まった所で上へはずします。

(5) ピックアップのショート
トラバースユニットのピックアップの静電保護の為、2ケ所ショートします。
(ショート箇所は、右図参照)

(6) メイン基板ASS'Yのはずしかた
3mmPタイトネジ(e)4本をはずし、基板を下へはずします。

2. トラバースユニットの交換

(1) トラバースユニットのワイヤーをはずす
- CX241：ピック用24P-FFC
- CX151：スピンドル用15P-FFC
- CX031：PUスライド用3P-PHワイヤー

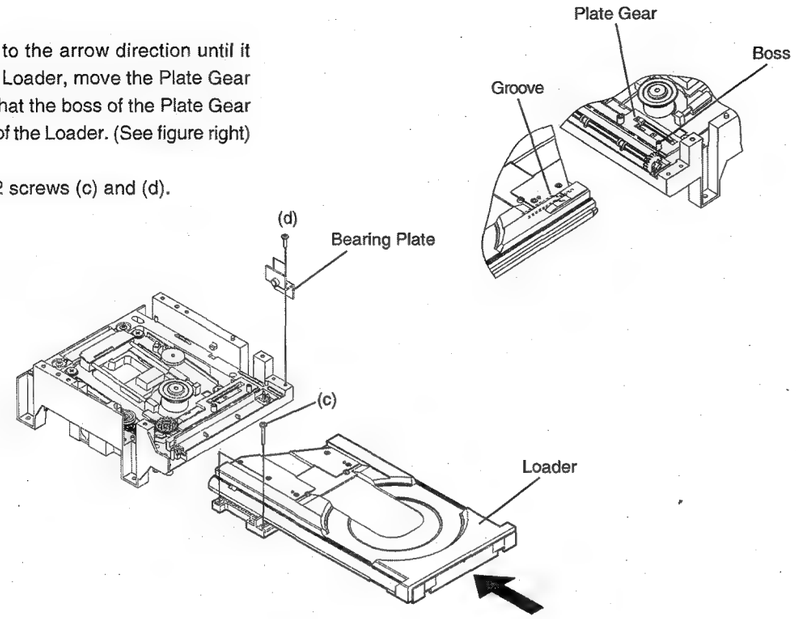
(2) トラバースユニットをはずす
特殊ネジ(f)4本とダンパー4個をはずし、トラバースユニットを上にはずします。

(3) トラバースユニットの取付
逆の手順で、トラバースユニットを取付けます。

3. Installing Loader

(1) Inserting Loader
Set and push the Loader to the arrow direction until it stops. When installing the Loader, move the Plate Gear to right beforehand so as that the boss of the Plate Gear fits in the backside groove of the Loader. (See figure right)

(2) Fixing Loader
Fix the Loader with each 2 screws (c) and (d).



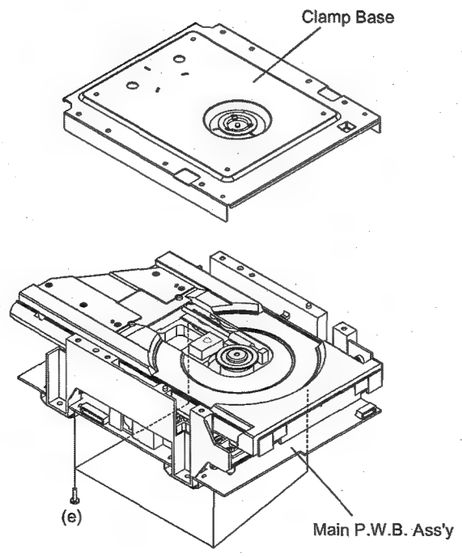
4. Assembly (1)

(1) Assembling Main P.W.B. Ass'y
Fix the Main P.W.B. Ass'y with 4 pcs of 3mm P-tight screw (e).

(2) Removing Pickup-short Solder
After connecting 24P-FFC of the Pickup with P.W.B., remove solder from 2 shorted positions.

(3) Temporary Positioning Clamp Base
To protect your eyes from laser light, put the Clamp Base temporarily.

(4) Positioning up Traverse Unit
Connect the following wires of the Mechanism Unit, and operate it.
• CX141: 14P-PH wire for power
• CX131: 13P-FFC wire from Display P.W.B.
Turn on the power to the unit, and press "OPEN/CLOSE" button to close the Loader.
The Traverse Unit rises up. (display: 0h00m00s)
Pull out the Loader forward, and lift up to take it out.



3. ローダーの組立

(1) ローダーの挿入
ローダーを矢印方向へ止まるまで押しこみます。
ローダを組込時、プレートギアのボスがトレイ裏面の溝に合う様にプレートギアを右側へ寄せておきます。(右図参照)

(2) ローダーの取付
(c)、(d)のネジ各2本を取付けます。

4. 組立 (1)

(1) メイン基板ASS'Yの取付
3mmPタイトネジ(e)4本で基板を取付けます。

(2) ピックアップのショートはずし
ピックアップの24PFFCを基板へ接続後、2ヶ所のショートをはずします。

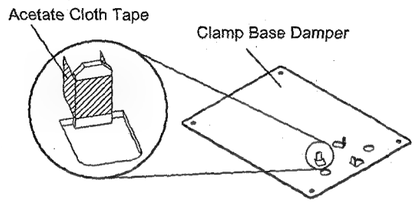
(3) クランプベースの仮置き
レーザーから目を保護する為、クランプベースを仮置きします。

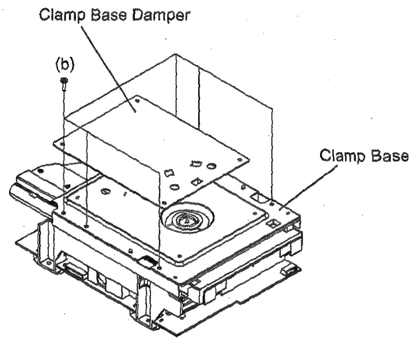
(4) トラバースユニットをアップする。
メカユニットの下記ワイヤーを接続し、メカを動作させます。
• CX141：電源用の14P-PHワイヤー接続
• CX131：ディスプレイ基板からの13P-FFCワイヤー接続
セットの電源を入れ、ローダー開閉ボタンで、CLOSEさせます。トラバースユニットがアップします。
(0h00m00s：表示)
ローダーを前面へ引出し、止まった所で上へはずします。

5. Assembly (2)

(1) Attaching Tape to Clamp Base Damper
Attach acetate cloth tape to 3 projections of the Clamp Base Damper backside.

(2) Assembling Clamp Base
Set the Clamp Base Damper with positioning for clamper by 3 projections.
Fix the Clamp Base with 6 pcs of 3mm P-tight screw (b).

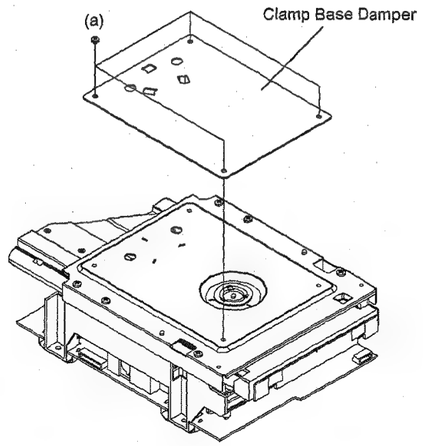




6. Assembly (3)

(1) Detaching Tape from Clamp Base Damper
Detach acetate cloth tape from 3 projections of the Clamp Base Damper backside.

(2) Assembling Clamp Base Damper
Set the Clamp Base Damper to the Clamp Base contrary to the direction set in step above.
Fix the Clamp Base Damper with 4 pcs of 3mm S-tight screw (a).



5. 組立 (2)

(1) クランプベースダンパーへのアセクロ貼付
クランプベースダンパー裏面の突起3箇所へアセテートクロステープを貼付します。

(2) クランプベースの取付
クランプベースダンパーを挿入し、3箇所の突起でクランパーの位置決めを行います。3mmPタイトネジ(b)6本で、クランプベースを取付けます。

6. 組立 (3)

(1) クランプベースダンパーからアセクロはがし
クランプベースダンパー裏面の突起3箇所からアセテートクロステープをはがします。

(2) クランプダンパーベースの取付
クランプベースダンパーを、クランプベースに先程と反対向きに挿入します。3mmSタイトネジ(a)4本で、クランプベースダンパーを取付けます。

SERVICE MODE

1. Aging Mode

(1) preparation

(a) Equipment used: Any one of DVD Karaoke Disc (containing more than 10 titles).

(b) Unit setting : No spec other than the following procedure (Aging mode).
At the tray open status, press the "POWER" button to turn on the power while pressing the "PLAY" and "OPEN/CLOSE" buttons for DVD operation simultaneously. ▶II mark on the FL lights, and the unit is set to the heat run mode.

(2) procedure

(a) According the above, set to the aging mode.

(b) Set a DVD Karaoke disc to the tray and press the "PLAY" button once. II mark on the FL blinks, and aging operation(after playback title-1 and title-10 of the disc, the tray open/close is made automatically, then playback the title-1 again) starts. This aging operation continues automatically until it is stopped or it stops caused by an error. In case of some error in DVD, the following error messages are displayed on the FL.

No	Error contents	FL display
1	Bad Disc	ERROR 02
2	Focus Error	ERROR 04
3	Read Error	ERROR 03
4	Tracking Error	ERROR 04
5	Tray Error	ERROR 05
6	Navigation Pack Read Error	ERROR 06
7	Cmmunication Error	ERROR07

サービスモードについて

1.エージングモード

(1) 準備

(a) 使用機器：DVD カラオケディスク（10 タイトル以上の物）。

(b) 本体設定：下記設定以外規定無。
（エージングモード）
トレイを開けた状態で DVD ユニットの「再生ボタン」+「開 / 閉ボタン」を同時に押しながら「電源ボタン」を押してセットの電源を入れると、FL 管の ▶II マークが点灯し、ヒートランモードに設定される。

(2) 手順

(a) 上記手順でエージングモードに設定する。

(b) トレイに DVD カラオケディスクを入れ、「再生ボタン」を 1 回押して、FL 管の II マークが点滅になると、「ディスクのタイトル 1 とタイトル 10 を再生した後、トレイを自動で開 / 閉し、再度タイトル 1 の再生を行う。」エージング動作になります。停止させるか、エラーにて停止するまでこの動作を自動で繰り返します。DVD 部にエラーが発生した場合は、FL 管に下表のエラーが表示されます。

No.	エラー内容	FL 管表示
1	不良ディスク	ERROR 02
2	フォーカスエラー	ERROR 04
3	リードエラー	ERROR 03
4	トラッキングエラー	ERROR 04
5	トレイエラー	ERROR 05
6	ナビゲーションパックエラー	ERROR 06
7	コマンド通信エラー	ERROR 07

2. Initial Setting Mode

(1) Preparation

(a) Equipment used: None

(b) Unit setting: No spec other than the following procedure

(2) Procedure

(a) Initialize the DVD player when µcom, peripheral parts of µcom, or Main P.W.B. has been replaced in servicing.

(b) Carry out the following to restore factory setting mode. At the player stop condition, press 3 buttons for DVD operation("PLAY","OPEN/CLOSE", and " ▶▶| SKIP") until "INITIALIZE" appears and disappears in the FL.
("Initialized" appears and disappears on the TV screen.)

(c) All user setting will be lost and its factory setting will be restored when this initialization is made. Be sure to memorize your setting for restoring again after the initialization.

2.初期設定モード

(1) 準備

(a) 使用機器：無

(b) 本体設定：下記手順以外規定無。

(2) 手順

(a) サービスにて、マイコンやマイコン周辺部分やメイン基板を交換した場合は、ＤＶＤ プレーヤーの初期化を行ってください。

(b) セットの初期化を下記の手順で行い、工場出荷モードに設定する。
セットが停止状態にて、ＤＶＤ 操作部の「再生ボタン」+「開 / 閉ボタン」+「▶▶|（スキップ）ボタン」の 3 重押しを ＦＬ 管に "INITIALIZE" が表示され消えるまで押します。（ＴＶ 画面には" 初期化しました" が表示され消えます。）

(c) 初期化を行うとお客様が設定した内容が工場出荷状態に戻りますので、あらかじめ設定内容を控えておき初期化後に再設定してください。

3. μ-Com Firm Check Mode

(1) Preparation

(a) Equipment used: None

(b) Unit setting: No spec other than the following procedure.

(2) Procedure

(a) Press the "POWER" button to turn on the power while pressing the "PLAY" and "OPEN/CLOSE" buttons for DVD operation simultaneously.

(b) FL all light mode.
This mode is for detecting FL defects. Press "STILL/PAUSE ▮▮ " on the remote control unit once to light all FL segments.

(c) DVD μcom and main unit μcom firm check mode. This mode is for displaying the status of each μcom employed.

- DVD μcom firm: Press the "MENU" button or "PUSH ENTER" button.
- Each time the "MENU" button or "PUSH ENTER" button on the remote control unit is pressed, μcom firm is displayed one after another.

Ex.: [DRV 6334-1, B/E 030825, SYSTEM 0001, DSP1 6332, DSP2 6333]

	Set Serial No. (lower 5 digits)	Drive μcom	B/E μcom	SYSTEM μcom	DSP1	DSP2
1	00001-	030825	6334-1	0001	6332	6333
2						
3						
4						

3.マイコンファームチェックモード

(1) 準備

(a) 使用機器：無

(b) 本体設定：下記手順以外規定無。

(2) 手順

(a) ＤＶＤ操作部の「再生ボタン」と「開 / 閉ボタン」を押しながらセットの「電源ボタン」を押し電源を入れます。

(b) ＦＬ管全点灯モード。
ＦＬ管の故障判別用のモードで、リモコンの「スティル / ポーズ ▮▮ ボタン」を押すとＦＬ管が全点灯します。

(c) ＤＶＤマイコン及び本体マイコンのファーム確認モード
搭載されている各マイコンのファーム状態を表示します。

・ＤＶＤマイコンのファーム：リモコンの「メニューボタン」または、PUSH ENTER ボタンを押します。

・リモコンのメニューボタンまたは、PUSH ENTER ボタンを押すたびにマイコンファームを次々と表示します。
表示例：〔DRV6334-1、B/E 030825、SYSTEM 0001、Dsp1 6332、Dsp2 6333〕

	セットのシリアル番号（下５桁）	ドライブマイコン	B/E マイコン	システムマイコン	Dsp1	Dsp2
1	00001～	030825	6334-1	0001	6332	6333
2						
3						
4						

4. Setting up the test mode

(1) Setting up

- In order to set up the test mode, you press STOP button and REV button simultaneously in the heat-run mode.Fundamentaly, you can set up the test mode at the stop state after disc loading. (Heat-run mode is set up by pressing PLAY button,holding OPEN/CLOSE button. If it becomes heat run mode, PLAY indicator and PAUSE indicator will light up.)

LOADING display

↓

FL display (The display part of 13 digits)												
1	2	3	4	5	6	7	8	9	10	11	12	13
T												

(2) Mode Select

- There are two, servo adjustment value display mode and trace mode (error rate display), in the mode.

(a) If the REV button or the FWD button is pushed in the test mode, it will become servo adjustment value display mode.

FL display (The display part of 13 digits)												
1	2	3	4	5	6	7	8	9	10	11	12	13
T	3											

(b) If the REV button or the FWD button is pushed again, it will become the trace mode (error rate display).

FL display (The display part of 13 digits)												
1	2	3	4	5	6	7	8	9	10	11	12	13
T	7											

(3) Mode decision

- The mode will be decided if the PLAY button is pushed in the state where the mode is chosen.

(a) In the case of servo adjustment value display mode, a focus offset adjustment value is displayed.

FL display (The display part of 13 digits)												
1	2	3	4	5	6	7	8	9	10	11	12	13
T	3	1	n	n	n	n	n	n	n	n	n	n

(n:adjustment value)

(b) In the case of trace mode (error rate display), trace of the circumference in one layer is chosen.

FL display (The display part of 13 digits)												
1	2	3	4	5	6	7	8	9	10	11	12	13
T	7	1	F	F	F	F	F	F	F	F	F	F

(F: An address and an error rate display F at the time of undecided.)

(4) Change within the mode

- If the REV button or the FWD button is pushed in the state where the mode is decided, a change within the mode will be made.

(a) In the case of servo adjustment value display mode (refer to table 1 servo adjustment value display mode details)

FL display (The display part of 13 digits)												
1	2	3	4	5	6	7	8	9	10	11	12	13
T	X	X	n	n	n	n	n	n	n	n	n	n

(XX:selection mode [31–62] n:adjustment value)

4. テストモード

(1) テストモードへの投入

・テストモードへの投入はヒートランモード時に STOP キーと REV キーを 2 重押しすることで行う。基本的にディスクローディング後の停止状態でテストモードに投入する。(ヒートランモードへの投入は OPEN/CLOSE キーと PLAY キーを 2 重押しすることで行う。ヒートランモードになると PLAY インジケータと PAUSE インジケータが点灯する。)

LOADING 表示

↓

FL 管の表示 (13 桁の表示部)												
1	2	3	4	5	6	7	8	9	10	11	12	13
T												

(2) モードの選択

・モードには、サーボ調整値表示モードとトレースモード (エラーレート表示) の 2 つがある。

(a) テストモード投入後に REV キー又は FWD キーを押すと、サーボ調整値表示モードになる。

FL 管の表示 (13 桁の表示部)												
1	2	3	4	5	6	7	8	9	10	11	12	13
T	3											

(b) 再度 REV キー又は FWD キーを押すとトレースモード (エラーレート表示) になる。

FL 管の表示 (13 桁の表示部)												
1	2	3	4	5	6	7	8	9	10	11	12	13
T	7											

(3) モードの確定

・モードを選択してある状態で PLAY キーを押すとモードを確定する。

(a) サーボ調整値表示モードの場合は、フォーカスオフセット調整値を表示する。

FL 管の表示 (13 桁の表示部)												
1	2	3	4	5	6	7	8	9	10	11	12	13
T	3	1	n	n	n	n	n	n	n	n	n	n

(n: 調整値)

(b) トレースモード (エラーレート表示) の場合は、1 層内周のトレースを選択する。

FL 管の表示 (13 桁の表示部)												
1	2	3	4	5	6	7	8	9	10	11	12	13
T	7	1	F	F	F	F	F	F	F	F	F	F

(F: アドレス及びエラーレートは未確定時、F を表示する。)

(4) モード内での変更

・モードを確定してある状態で REV キー又は FWD キーを押すとモード内での変更を行う。

(a) サーボ調整値表示モードの場合 (表 1 サーボ調整値表示モード詳細 参照)

FL 管の表示 (13 桁の表示部)												
1	2	3	4	5	6	7	8	9	10	11	12	13
T	X	X	n	n	n	n	n	n	n	n	n	n

(X X: 選択モード [31 ～ 62]、n: 調整値)

(b) In the case of trace mode (error rate display) (refer to table 2 trace mode details)

FL display (The display part of 13 digits)												
1	2	3	4	5	6	7	8	9	10	11	12	13
T	Y	Y	F	F	F	F	F	F	F	F	F	F

(YY: select mode [71--94] ,F: address and an error rate display F at the time of undecided)

(b) トレースモード (エラーレート表示) の場合 (表 2 トレースモード詳細 参照)

FL 管の表示 (13 桁の表示部)												
1	2	3	4	5	6	7	8	9	10	11	12	13
T	Y	Y	F	F	F	F	F	F	F	F	F	F

(Y Y: 選択モード [71 ～ 94]、F: アドレス及びエラーレートは未確定時、F を表示する。)

(5) Execution of trace mode (error rate display) (refer to table 2 trace mode details)

- Trace will be performed if the PLAY button is pushed after choosing operation.

FL display (The display part of 13 digits)												
1	2	3	4	5	6	7	8	9	10	11	12	13
T	Y	Y	m	m	m	m	m	m	l	l	l	l

(YY:select mode[71--94],m:address[PBA][HEX],
l:error rate[COUNT/SEC][HEX])

(Note) Renewal of data is carried out for every CD:300 frame and DVD:85ECC block.

- The mode chosen when selection mode was changed into the trace execution and the PLAY button was pushed is performed from the beginning.When the PLAY button is pushed without changing selection mode, the mode under selection is performed from the beginning.(If the PLAY button is pushed, the address corresponding to the chosen mode will be searched again.)

(5) トレースモード (エラーレート表示) の実行 (表 2 トレースモード詳細 参照)

- 動作を選択した後、PLAY キーを押すとトレースを実行する。

FL 管の表示 (13 桁の表示部)												
1	2	3	4	5	6	7	8	9	10	11	12	13
T	Y	Y	m	m	m	m	m	m	l	l	l	l

(Y Y: 選択モード [71 ～ 94]、m: アドレス [PBA][HEX]、
l : エラーレート [COUNT/SEC][HEX])
(注)CD:300 フレーム ,DVD:85ECC ブロック毎にデータ更新する。

- トレース実行中に選択モードを変更し、PLAY キーを押すと選択したモードを最初から実行する。選択モードを変更せずに PLAY キーを押した場合も、選択中のモードを最初から実行する。
(PLAY キーを押したら、選択しているモードに対応したアドレスを再度サーチする。)

(6) Other operation

(a) If the STOP button is pushed into servo adjustment value display mode and trace mode (error rate display), it will return to the state at the time of a test mode injection.

FL display (The display part of 13 digits)												
1	2	3	4	5	6	7	8	9	10	11	12	13
T												

(b) Push the OPEN/CLOSE button twice and carry out servo readjustment in OPEN operation ->CLOSE operation.
(It readjusts with test mode.)

OPEN display
↓
CLOSE display
↓
LOADING display
↓

FL display (The display part of 13 digits)												
1	2	3	4	5	6	7	8	9	10	11	12	13
T												

(c) By pressing STOP button and REV button simultaneously in the test mode, it returns to heat-run mode.

(6) その他の動作

(a) サーボ調整値表示モード、トレースモード (エラーレート表示) 中に STOP キーを押すとテストモード投入時の状態に戻る。

FL 管の表示 (13 桁の表示部)												
1	2	3	4	5	6	7	8	9	10	11	12	13
T												

(b) OPEN/CLOSE キーを 2 回押して、OPEN 動作→ CLOSE 動作で、サーボ再調整する。
(テストモードのまま再調整する。)

OPEN 表示
↓
CLOSE 表示
↓
LOADING 表示
↓

FL 管の表示 (13 桁の表示部)												
1	2	3	4	5	6	7	8	9	10	11	12	13
T												

(c) テストモード中に STOP キーと REV キーの 2 重押し (投入時と同じキー) で、ヒートランモードに戻る。

(7) Test mode detailed table

Table 1: servo adjustment value display mode details

XX	Contents	Contents supplement	Contents explanation
31	RFP FE Offset	layer 0	PI of CXD1881AR An offset value and FE An offset value is displayed. Pi offset is shown in higher rank 1Byte. FE offset is shown in low rank 1Byte.
32	RFP TE Bal Gain	layer 0	TE balance gain value of CXD1881AR is displayed.
33	RFP TE Output Gain	layer 0	TE output gain value of CXD1881AR is displayed.
34	RFP TE Offset	layer 0	TE offset value of CXD1881AR is displayed.
35	DSP TE Offset	layer 0	TE offset value inside CXD1885Q is displayed.
36	Fcs Bias	layer 0	The focus bias value inside CXD1885Q is displayed.
37	Fcs AGC	layer 0	The inside focus gain (setting 0x2000 to 1) value of CXD1885Q is displayed.。 Therefore, 0x1FF2 and in the case of 0x2012, it is as follows. 0x1FF2(8178) / 0x2000(8192) = 0.998291015625(fold) 0x2012(8210) / 0x2000(8192) = 1.002197265625(fold) Notes: The inside of ( ) is a decimal system equivalent.
38	Trk AGC	layer 0	The inside tracking gain (setting 0x2000 to 1) value of CXD1885Q is displayed.。 Therefore, 0x1FF2 and in the case of 0x2012, it is as follows. 0x1FF2(8178) / 0x2000(8192) = 0.998291015625(fold) 0x2012(8210) / 0x2000(8192) = 1.002197265625(fold) Notes: The inside of ( ) is a decimal system equivalent
39	Pi Offset	layer 0	It is the parameter calculated inside CXD1885Q. The value displayed on a set serves as the number of complement of 2 of 2Bytes(es) doubled 256. A voltage value is 6.25mV per bit.
40	FE Offset	layer 0	It is the parameter calculated inside CXD1885Q. The value displayed on a set serves as the number of complement of 2 of 2Bytes(es) doubled 256. A voltage value is 6.25mV per bit.
41	SE Offset	layer 0	It is the parameter calculated inside CXD1885Q. The value displayed on a set serves as the number of complement of 2 of 2Bytes(es) doubled 256. A voltage value is 6.25mV per bit.
42	RFP FE Offset	layer 1	PI of CXD1881AR An offset value and FE An offset value is displayed. Pi offset is shown in higher rank 1Byte. FE offset is shown in low rank 1Byte.
43	RFP TE Bal Gain	layer 1	TE balance gain value of CXD1881AR is displayed.
44	RFP TE Output Gain	layer 1	TE output gain value of CXD1881AR is displayed.
45	RFP TE Offset	layer 1	TE offset value of CXD1881AR is displayed.
46	DSP TE Offset	layer 1	It is the parameter calculated inside CXD1885Q. The value displayed on a set serves as the number of complement of 2 of 2Bytes(es) doubled 256. A voltage value is 6.25mV per bit.
47	Fcs Bias	layer 1	It is the parameter calculated inside CXD1885Q. The value displayed on a set serves as the number of complement of 2 of 2Bytes(es) doubled 256. A voltage value is 6.25mV per bit.

(7) テストモード詳細一覧表

表 1 サーボ調整値表示モード詳細

XX	内容	内容補足	内容説明
31	RFP FE Offset	レイヤ 0	CXD1881AR の PI オフセット値と FE オフセット値を表示。 上位 1Byte に Pi オフセットを示す。 下位 1Byte に FE オフセットを示す。
32	RFP TE Bal Gain	レイヤ 0	CXD1881ARのTEバランスゲイン値を表示す。
33	RFP TE Output Gain	レイヤ 0	CXD1881ARのTE 出力ゲイン値を表示す。
34	RFP TE Offset	レイヤ 0	CXD1881AR の TE オフセット値を表示。
35	DSP TE Offset	レイヤ 0	CXD1885Q 内部の TE オフセット値を表示。
36	Fcs Bias	レイヤ 0	CXD1885Q 内部のフォーカスバイアス値を表示。
37	Fcs AGC	レイヤ 0	CXD1885Q 内部フォーカスゲイン(0x2000 を 1 として) 値を表示。 0x1FF2 や 0x2012 の場合、以下のようになる。 0x1FF2(8178) / 0x2000(8192) = 0.998291015625(倍) 0x2012(8210) / 0x2000(8192) = 1.002197265625(倍) 注 :( ) 内は 10 進換算値
38	Trk AGC	レイヤ 0	CXD1885Q内部トラッキングゲイン(0x2000 を 1 として) 値を表示。 0x1FF2 や 0x2012 の場合、以下のようになる。 0x1FF2(8178) / 0x2000(8192) = 0.998291015625(倍) 0x2012(8210) / 0x2000(8192) = 1.002197265625(倍) 注 :( ) 内は 10 進換算値
39	Pi Offset	レイヤ 0	CXD1885Q 内部で計算されるパラメータ。 セットに表示される値は、256 倍された 2Bytes の 2 の補数となる。 電圧値は 1bit あたり 6.25mV。
40	FE Offset	レイヤ 0	CXD1885Q 内部で計算されるパラメータ。 セットに表示される値は、256 倍された 2Bytes の 2 の補数となる。 電圧値は 1bit あたり 6.25mV。
41	SE Offset	レイヤ 0	CXD1885Q 内部で計算されるパラメータ。 セットに表示される値は、256 倍された 2Bytes の 2 の補数となる。 電圧値は 1bit あたり 6.25mV。
42	RFP FE Offset	レイヤ 1	CXD1881AR の PI オフセット値と FE オフセット値を表示。 上位 1Byte に Pi オフセットを示す。 下位 1Byte に FE オフセットを示す。
43	RFP TE Bal Gain	レイヤ 1	CXD1881ARのTEバランスゲイン値を表示。
44	RFP TE Output Gain	レイヤ 1	CXD1881AR の TE 出力ゲイン値を表示。
45	RFP TE Offset	レイヤ 1	CXD1881AR の TE オフセット値を表示。
46	DSP TE Offset	レイヤ 1	CXD1885Q 内部で計算されるパラメータ。 セットに表示される値は、256 倍された 2Bytes の 2 の補数となる。 電圧値は 1bit あたり 6.25mV。
47	Fcs Bias	レイヤ 1	CXD1885Q 内部で計算されるパラメータ。 セットに表示される値は、256 倍された 2Bytes の 2 の補数となる。 電圧値は 1bit あたり 6.25mV。

48	Fcs AGC	layer 1	The inside focus gain (setting 0x2000 to 1) value of CXD1885Q is displayed. Therefore, 0x1FF2 and in the case of 0x2012, it is as follows. 0x1FF2(8178) / 0x2000(8192) = 0.998291015625(fold) 0x2012(8210) / 0x2000(8192) = 1.002197265625(fold) Notes: The inside of ( ) is a decimal system equivalent.
49	Trk AGC	layer 1	The inside tracking gain (setting 0x2000 to 1) value of CXD1885Q is displayed. Therefore, 0x1FF2 and in the case of 0x2012, it is as follows. 0x1FF2(8178) / 0x2000(8192) = 0.998291015625(fold) 0x2012(8210) / 0x2000(8192) = 1.002197265625(fold) Notes: The inside of ( ) is a decimal system equivalent
50	Pi Offset	layer 1	It is the parameter calculated inside CXD1885Q. The value displayed on a set serves as the number of complement of 2 of 2Bytes(es) doubled 256. A voltage value is 6.25mV per bit.
51	FE Offset	layer 1	It is the parameter calculated inside CXD1885Q. The value displayed on a set serves as the number of complement of 2 of 2Bytes(es) doubled 256. A voltage value is 6.25mV per bit.
52	SE Offset	layer 1	It is the parameter calculated inside CXD1885Q. The value displayed on a set serves as the number of complement of 2 of 2Bytes(es) doubled 256. A voltage value is 6.25mV per bit.
53	PO error detection number	Error rate	It is invalid at the time of CD operation.
54	PO uncorrect-able error number	Error Rate	It is invalid at the time of CD operation.
55	PI error detec-tion number	Error Rate	CD : C1 error detection number
56	PI uncorrect-able error number	Error Rate	CD : C2 uncorrectable error number
57	Mirr Count	Disc dis-criminant	They are the contents at the time of disk distinction. Please refer to "Table 3 Disc distinction information" about the contents of a value.
58	Mirr Width	Disc dis-criminant	They are the contents at the time of disk distinction. Please refer to "Table 3 Disc distinction information" about the contents of a value.
59	FZC Count	Disc dis-criminant	They are the contents at the time of disk distinction. Please refer to "Table 3 Disc distinction information" about the contents of a value.
60	Pi Level	Disc dis-criminant	They are the contents at the time of disk distinction. Please refer to "Table 3 Disc distinction information" about the contents of a value.
61	Disc Type	Disc Type	They are the contents at the time of disk type. Please refer to "Table 4 Disc classification information" about the contents of a value.
62	PO error detection number and address	Error rate	PO error detection number is invalid at the time of CD operation.

48	Fcs AGC	レイヤ 1	CXD1885Q 内部フォーカスゲイン (0x2000 を 1 として) 値を表示。 0x1FF2 や 0x2012 の場合、以下のようになる。 0x1FF2(8178) / 0x2000(8192) = 0.998291015625(倍) 0x2012(8210) / 0x2000(8192) = 1.002197265625(倍) 注 :( ) 内は 10 進換算値
49	Trk AGC	レイヤ 1	CXD1885Q 内部トラッキングゲイン (0x2000 を 1 として) 値を表示。 0x1FF2 や 0x2012 の場合、以下のようになる。 0x1FF2(8178) / 0x2000(8192) = 0.998291015625(倍) 0x2012(8210) / 0x2000(8192) = 1.002197265625(倍) 注 :( ) 内は 10 進換算値
50	Pi Offset	レイヤ 1	CXD1885Q 内部で計算されるパラメータ。 セットに表示される値は、256 倍された 2Bytes の 2 の補数となる。 電圧値は 1bit あたり 6.25mV。
51	FE Offset	レイヤ 1	CXD1885Q 内部で計算されるパラメータ。 セットに表示される値は、256 倍された 2Bytes の 2 の補数となる。 電圧値は 1bit あたり 6.25mV。
52	SE Offset	レイヤ 1	CXD1885Q 内部で計算されるパラメータ。 セットに表示される値は、256 倍された 2Bytes の 2 の補数となる。 電圧値は 1bit あたり 6.25mV。
53	PO 誤り検出数	エラーレート	CD 時は無効。
54	PO 訂正不可数	エラーレート	CD 時は無効。
55	PI 誤り検出数	エラーレート	CD 時は C1 誤り検出数。
56	PI 訂正不可数	エラーレート	CD 時は C2 訂正不可数。
57	Mirr Count	ディスク判別	ディスク判別時の内容。 値の内容は「表 3 ディスク判別情報」を参照。
58	Mirr Width	ディスク判別	ディスク判別時の内容。 値の内容は「表 3 ディスク判別情報」参照。
59	FZC Count	ディスク判別	ディスク判別時の内容。 値の内容は「表 3 ディスク判別情報」参照。
60	Pi Level	ディスク判別	ディスク判別時の内容。 値の内容は「表 3 ディスク判別情報」参照。
61	Disc Type	ディスク種別	ディスク種別の内容。 値の内容は「表 4 ディスク種別情報」参照。
62	PO 誤り検出数とアドレス	エラーレート	CD 時は PO 誤り検出数は無効。

Table 2: trace mode details

Y Y	Contents	Contents supplement
71	A display of PO error detection number of the inner circumference of 1-layer and an address.	It is invalid at the time of CD operation.
72	A display of PO uncorrectable number of the inner circumference of 1-layer and an address.	It is invalid at the time of CD operation.
73	A display of PI error detection number of the inner circumference of 1-layer and an address.	CD : C1 error detection number
74	A display of PI uncorrectable number of the inner circumference of 1-layer and an address.	CD : C2 uncorrectable error number
75	A display of PO error detection number of the central circumference of 1-layer and an address.	It is invalid at the time of CD operation.
76	A display of PO uncorrectable number of the central circumference of 1-layer and an address.	It is invalid at the time of CD operation.
77	A display of PI error detection number of the central circumference of 1-layer and an address.	CD : C1 error detection number
78	A display of PI uncorrectable number of the central circumference of 1-layer and an address.	CD : C2 uncorrectable error number
79	A display of PO error detection number of the outer circumference of 1-layer and an address.	It is invalid at the time of CD operation.
80	A display of PO uncorrectable number of the outer circumference of 1-layer and an address.	It is invalid at the time of CD operation.
81	A display of PI error detection number of the outer circumference of 1-layer and an address.	CD : C1 error detection number
82	A display of PI uncorrectable number of the outer circumference of 1-layer and an address.	CD : C2 uncorrectable error number
83	A display of PO error detection number of the inner circumference of 2-layer and an address.	In the case of 1-layer disc, it is invalid.
84	A display of PO uncorrectable number of the inner circumference of 2-layer and an address.	In the case of 1-layer disc, it is invalid.
85	A display of PI error detection number of the inner circumference of 2-layer and an address.	In the case of 1-layer disc, it is invalid.
86	A display of PI uncorrectable number of the inner circumference of 2-layer and an address.	In the case of 1-layer disc, it is invalid.
87	A display of PO error detection number of the central circumference of 2-layer and an address.	In the case of 1-layer disc, it is invalid.
88	A display of PO uncorrectable number of the central circumference of 2-layer and an address.	In the case of 1-layer disc, it is invalid.
89	A display of PI error detection number of the central circumference of 2-layer and an address.	In the case of 1-layer disc, it is invalid.
90	A display of PI uncorrectable number of the central circumference of 2-layer and an address.	In the case of 1-layer disc, it is invalid.
91	A display of PO error detection number of the outer circumference of 2-layer and an address.	In the case of 1-layer disc, it is invalid.
92	A display of PO uncorrectable number of the outer circumference of 2-layer and an address.	In the case of 1-layer disc, it is invalid.
93	A display of PI error detection number of the outer circumference of 2-layer and an address.	In the case of 1-layer disc, it is invalid.
94	A display of PI uncorrectable number of the outer circumference of 2-layer and an address.	In the case of 1-layer disc, it is invalid.

表 2 トレースモード詳細

Y Y	内容	補足説明
71	1 層内周の PO 誤り検出数とアドレスの表示	CD 時は無効。
72	1 層内周の PO 訂正不可数とアドレスの表示	CD 時は無効。
73	1 層内周の PI 誤り検出数とアドレスの表示	CD 時は C1 誤り検出数。
74	1 層内周の PI 訂正不可数とアドレスの表示	CD 時は C2 訂正不可数。
75	1 層中周の PO 誤り検出数とアドレスの表示	CD 時は無効。
76	1 層中周の PO 訂正不可数とアドレスの表示	CD 時は無効。
77	1 層中周の PI 誤り検出数とアドレスの表示	CD 時は C1 誤り検出数。
78	1 層中周の PI 訂正不可数とアドレスの表示	CD 時は C2 訂正不可数。
79	1 層外周の PO 誤り検出数とアドレスの表示	CD 時は無効。
80	1 層外周の PO 訂正不可数とアドレスの表示	CD 時は無効。
81	1 層外周の PI 誤り検出数とアドレスの表示	CD 時は C1 誤り検出数。
82	1 層外周の PI 訂正不可数とアドレスの表示	CD 時は C2 訂正不可数。
83	2 層内周の PO 誤り検出数とアドレスの表示	1 層ディスクの場合、無効。
84	2 層内周の PO 訂正不可数とアドレスの表示	1 層ディスクの場合、無効。
85	2 層内周の PI 誤り検出数とアドレスの表示	1 層ディスクの場合、無効。
86	2 層内周の PI 訂正不可数とアドレスの表示	1 層ディスクの場合、無効。
87	2 層中周の PO 誤り検出数とアドレスの表示	1 層ディスクの場合、無効。
88	2 層中周の PO 訂正不可数とアドレスの表示	1 層ディスクの場合、無効。
89	2 層中周の PI 誤り検出数とアドレスの表示	1 層ディスクの場合、無効。
90	2 層中周の PI 訂正不可数とアドレスの表示	1 層ディスクの場合、無効。
91	2 層外周の PO 誤り検出数とアドレスの表示	1 層ディスクの場合、無効。
92	2 層外周の PO 訂正不可数とアドレスの表示	1 層ディスクの場合、無効。
93	2 層外周の PI 誤り検出数とアドレスの表示	1 層ディスクの場合、無効。
94	2 層外周の PI 訂正不可数とアドレスの表示	1 層ディスクの場合、無効。

Table 3:Disc distinction information

	Mirr Count	Mirr Width	FZC Count	PI Level
No Disc	Except 2 and 3	-	-	-
CD High reflection	2	More than 0x8ED	-	More than 0x99
CD Low reflection	2	More than 0x8ED	-	Less than 0x98
DVD High reflection	2	Less than 0x8ED	1	More than 0x81
DVDLow reflection	2	Less than 0x8ED	1	Less than 0x80
DVD 2-layer	2	Less than 0x8ED	2	-
SACD Hybrid	3	-	-	-

PI level Formula：PI level (V) = Measured value × 1.6 ÷ 256
"-" : Invalid

表 3 ディスク判別情報

	Mirr Count	Mirr Width	FZC Count	PI Level
No Disc	2 と 3 以外	-	-	-
CD 高反射	2	0x8ED 以上	-	0x99 以上
CD 低反射	2	0x8ED 以上	-	0x98 以下
DVD 高反射	2	0x8ED 以下	1	0x81 以上
DVD 低反射	2	0x8ED 以下	1	0x80 以下
DVD 2 層	2	0x8ED 以下	2	-
SACD Hybrid	3	-	-	-

PI level 計算式：PI level (V) = 測定値× 1.6 ÷ 256
"-" は無効

Table 4: Disc classification information

Disc Type	Media
0x00	No Disc
0x01	Unknown Disc
0x04	DVD Single Low reflection
0x05	DVD Dual Parallel Low reflection
0x06	DVD Dual Opposite Low reflection
0x08	CDDA Low reflection
0x0A	VCD Low reflection
0x44	DVD Single High reflection
0x48	CDDA High reflection
0x4A	VCD High reflection
0x8F	SACD Hybrid Disc

表 4 ディスク種別情報

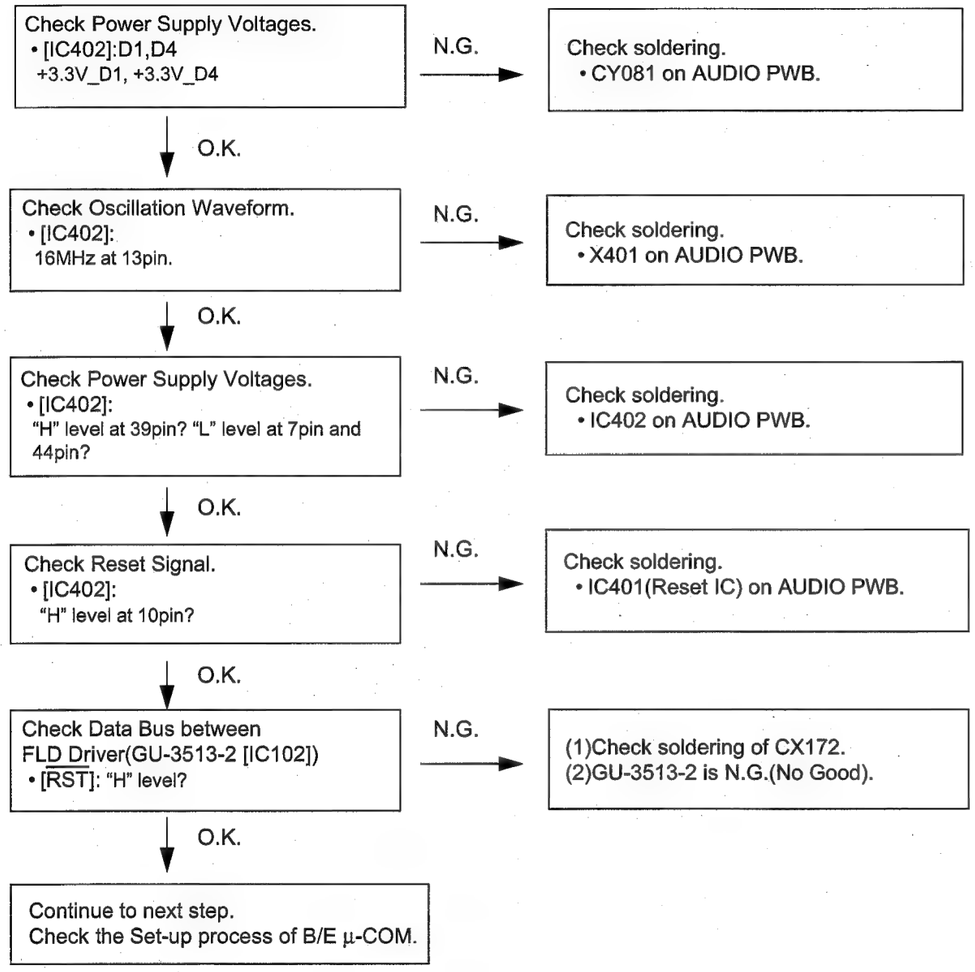
Disc Type	Media
0x00	No Disc
0x01	Unknown Disc
0x04	DVD Single 低反射
0x05	DVD Dual Parallel 低反射
0x06	DVD Dual Opposite 低反射
0x08	CDDA 低反射
0x0A	VCD 低反射
0x44	DVD Single 高反射
0x48	CDDA 高反射
0x4A	VCD 高反射
0x8F	SACD Hybrid Disc

TROUBLE SHOOTING

1. GU-3512 MAIN PWB

1.1. FL TUBE doesn't light

(1) Check the Set-up process of Panel μ-COM

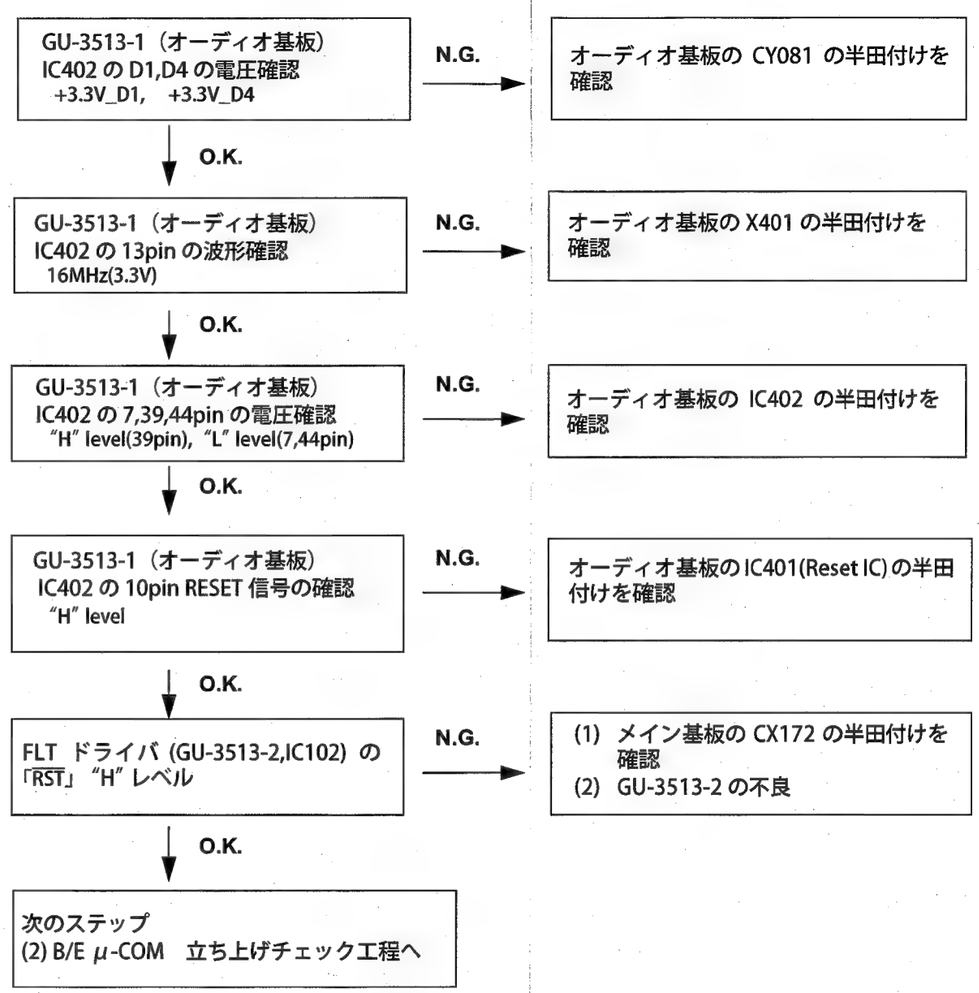


トラブルシューティング

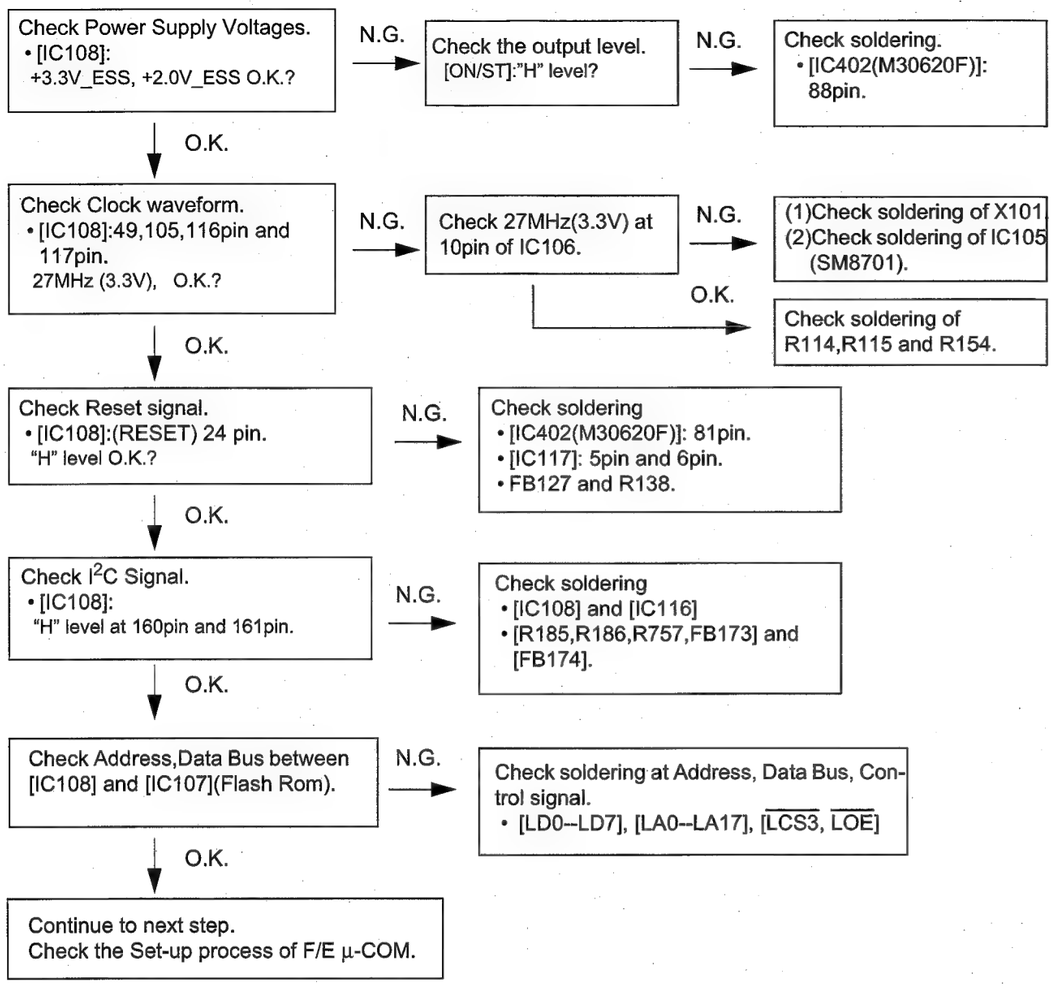
1.GU-3512 MAIN PWB

1.1. FL 管点灯せず

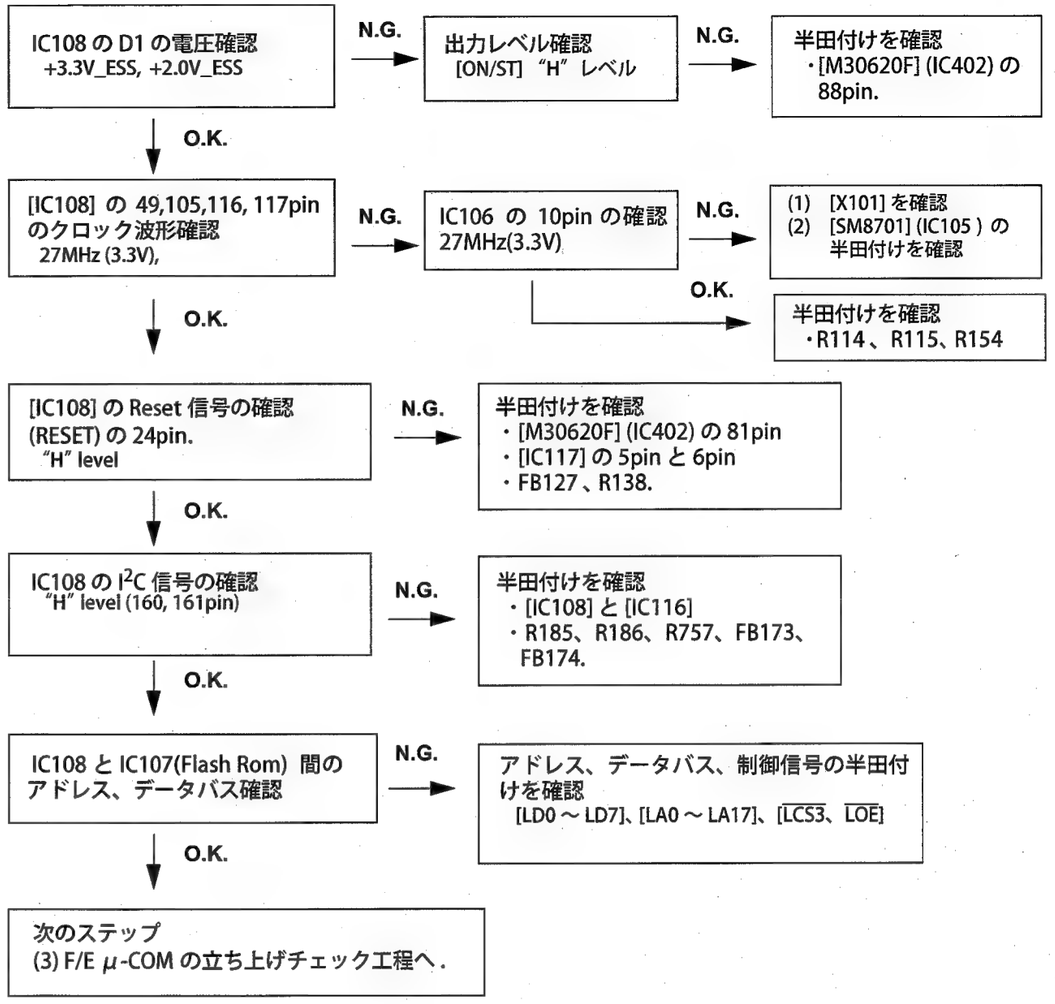
(1) システム μ-COM (IC402) 立ち上がりチェック工程



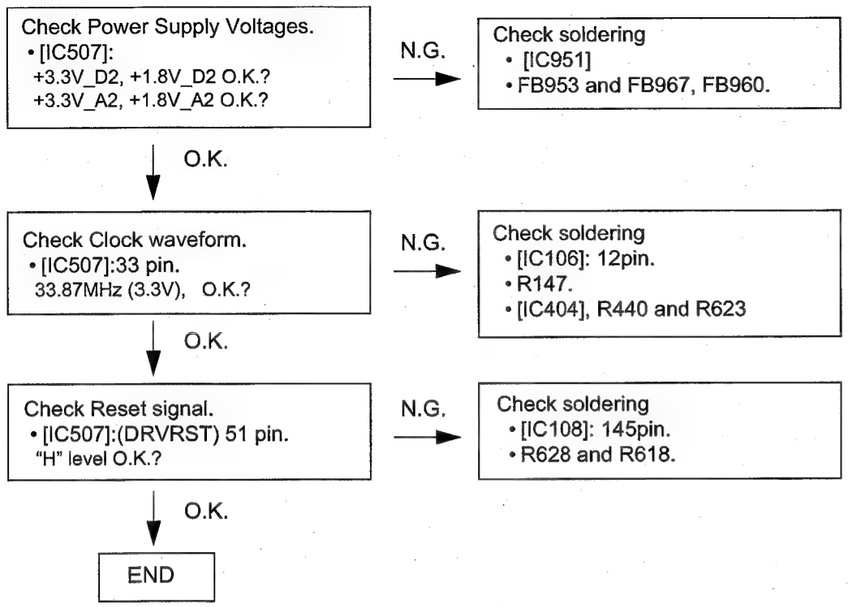
(2) Check the Set-up process of B/E μ-COM.



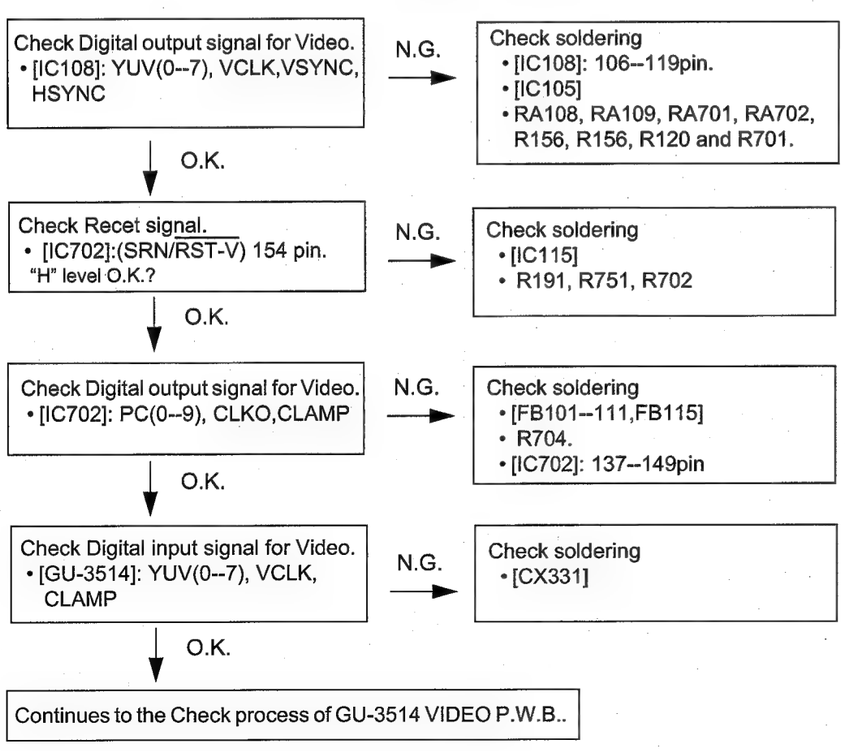
(2) B/E μ-COM 立ち上げチェック工程



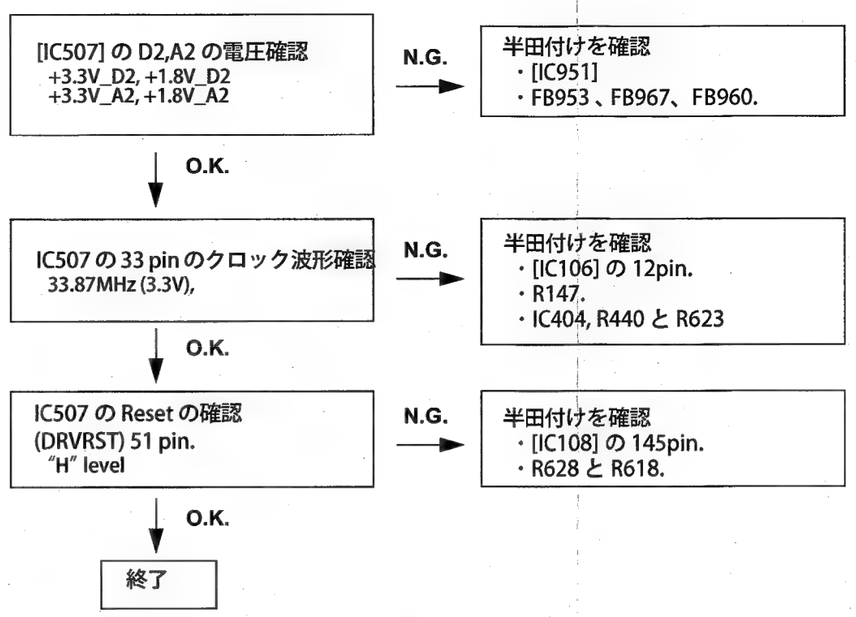
(3) Check the Set-up process of F/E μ-COM.



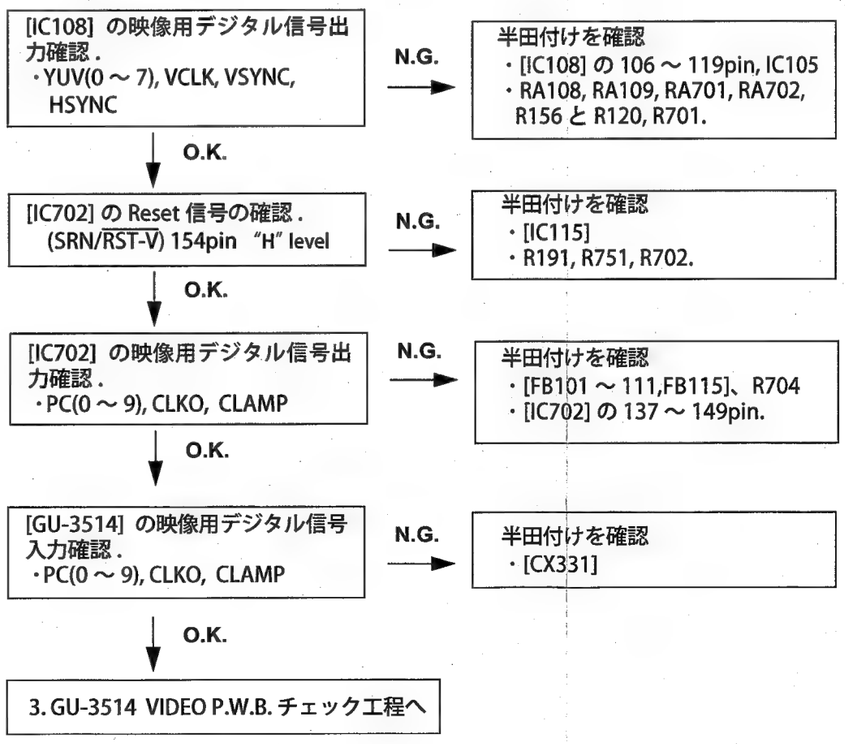
1.2. Image is not displayed. (Blue-back, DENON wallpaper)



(3) F/E μ-COM 立ち上げチェック工程

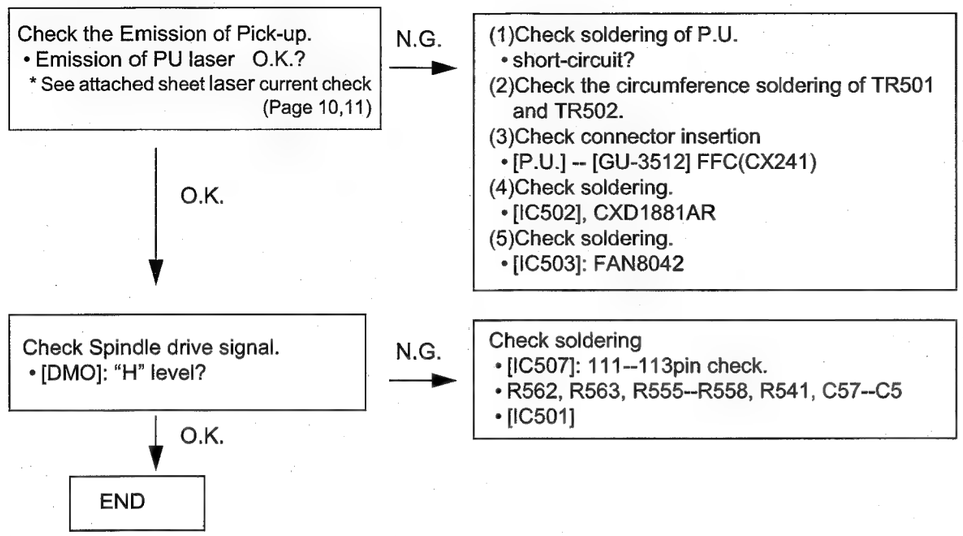


1.2. 映像 (ブルーバック , DENON 壁紙) 出ない。

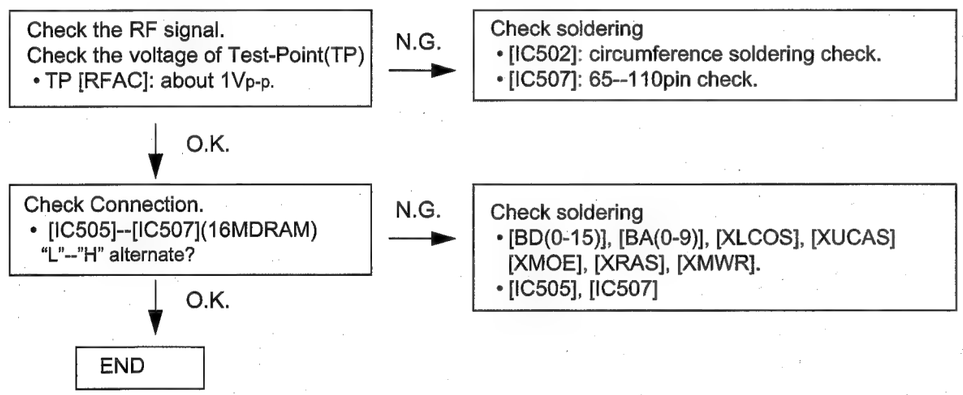


1.3. Does not Read Disc
[No PLAY], [00 00] displayed etc.

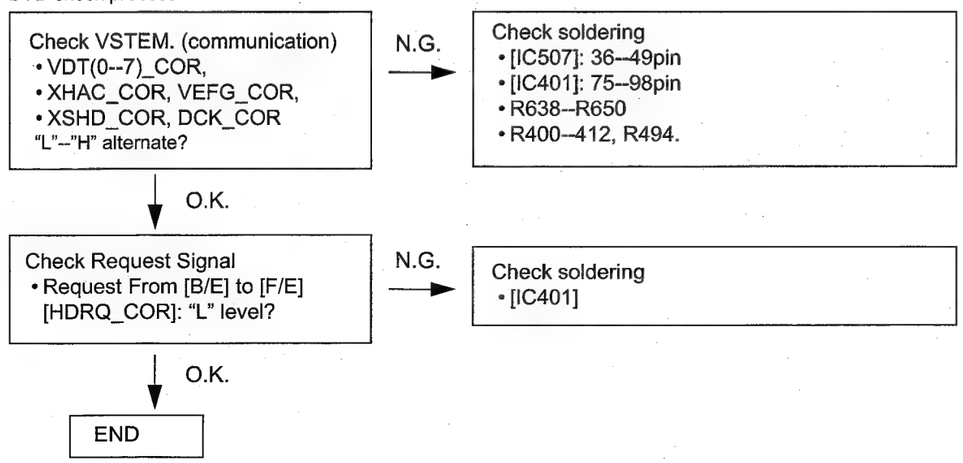
(1) Disc does not Rotate.



(2) CD check process

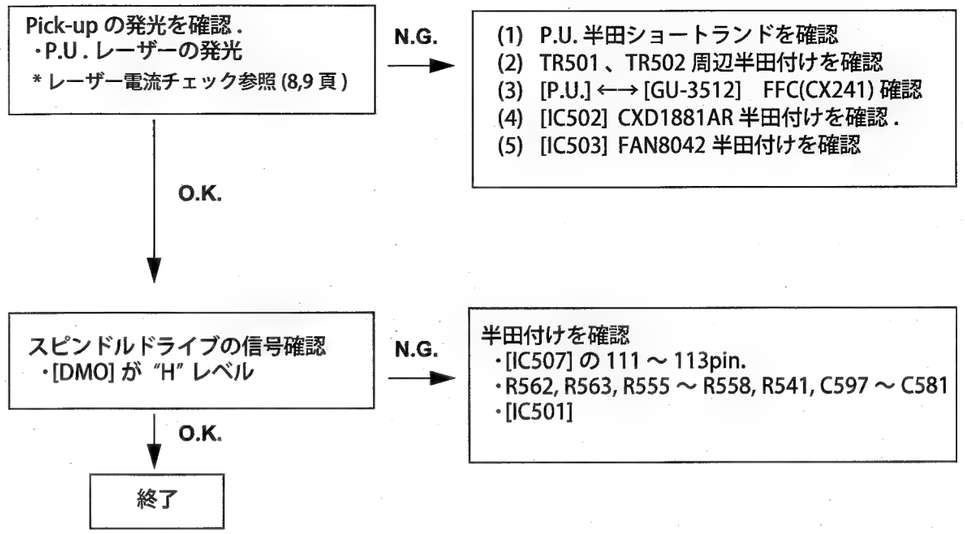


(3) DVD check process

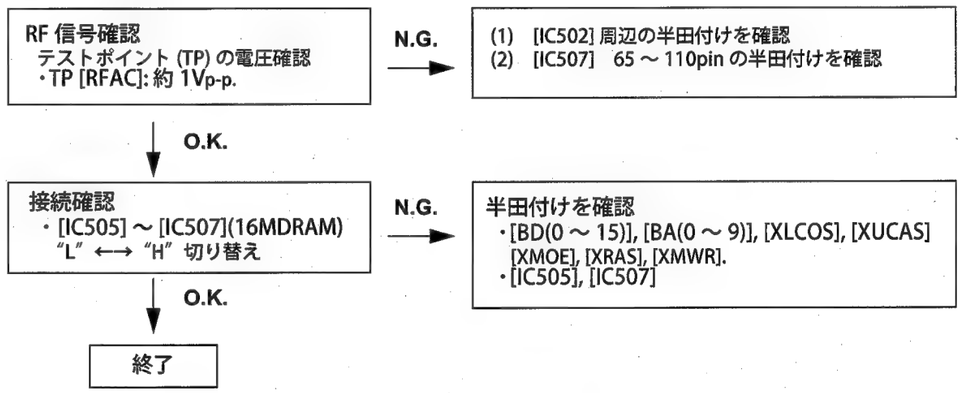


1.3. ディスクが読めない （ [No PLAY] [00 00] などの表示 ）

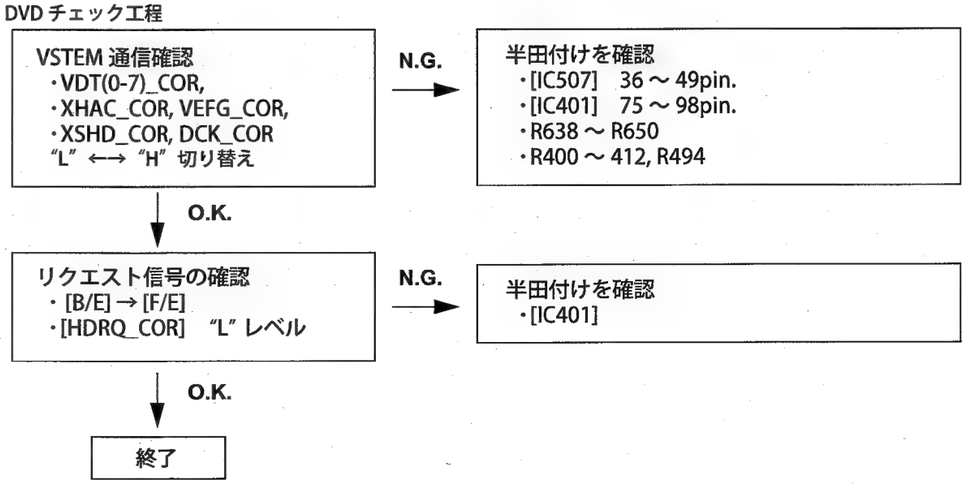
(1) ディスクが回転しない。



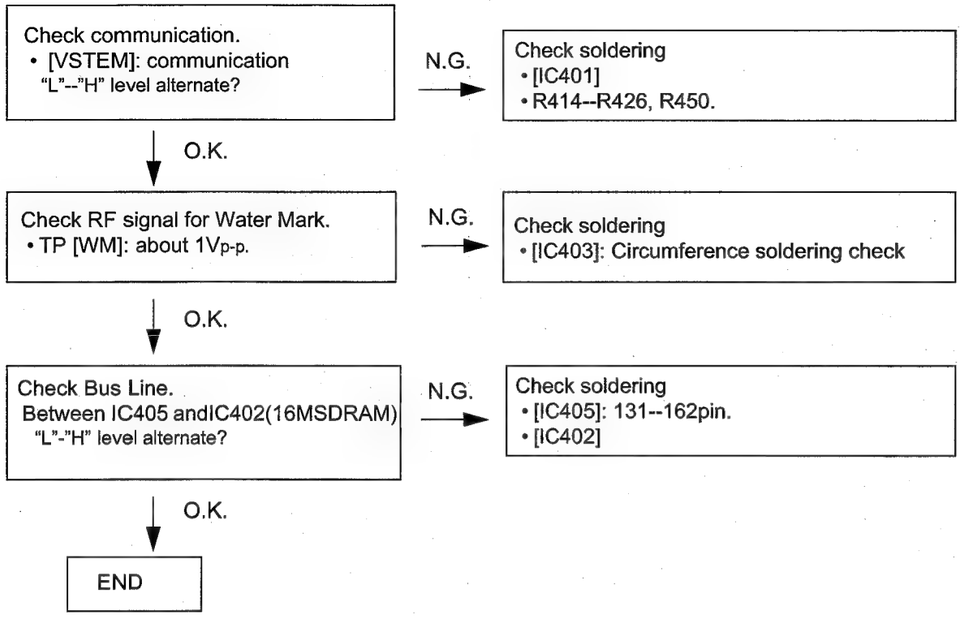
(2) CD チェック工程



(3) DVD チェック工程

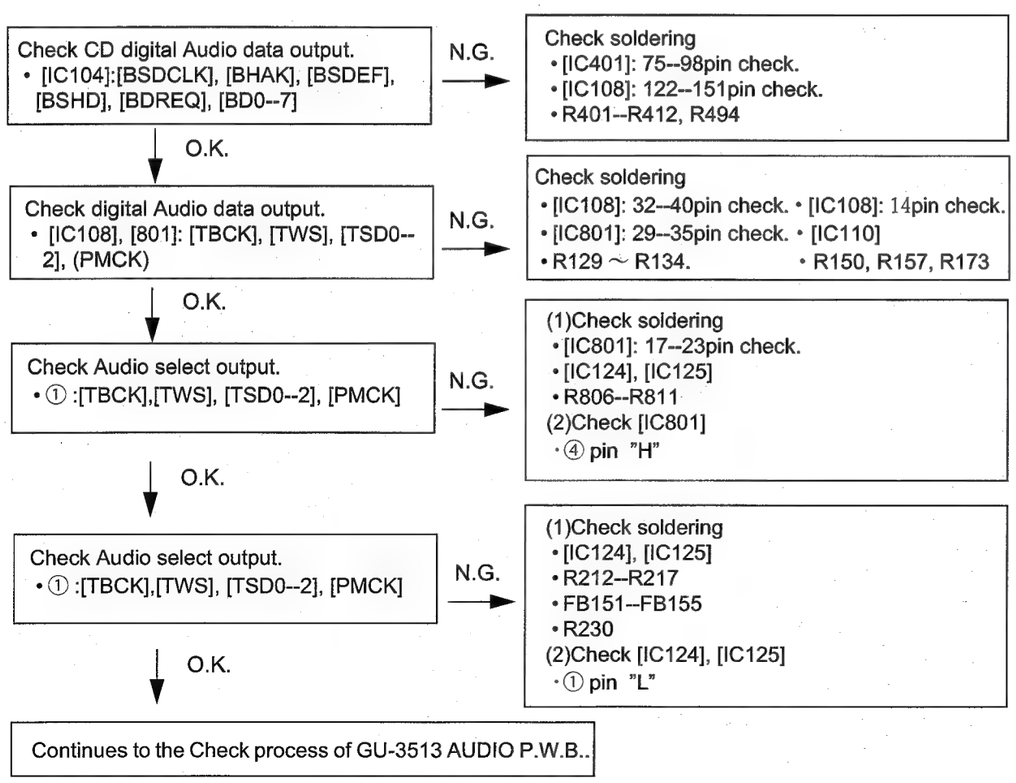


(4) SACD check process

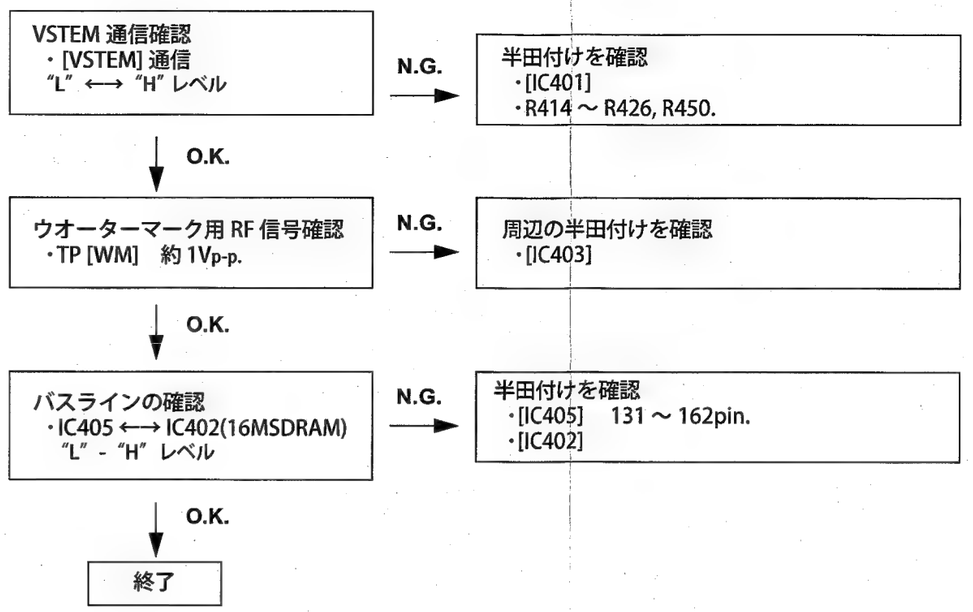


1.4. No sound, Noise generated

(1) DVD-VIDEO / AUDIO, CD

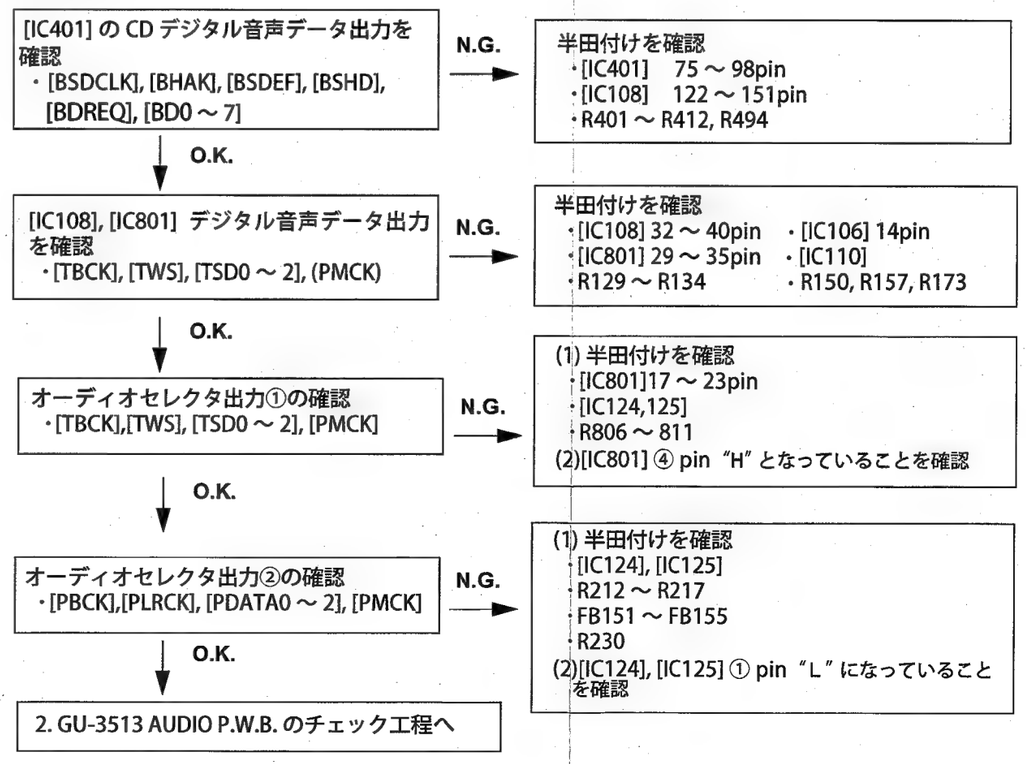


(4) SACD チェック工程

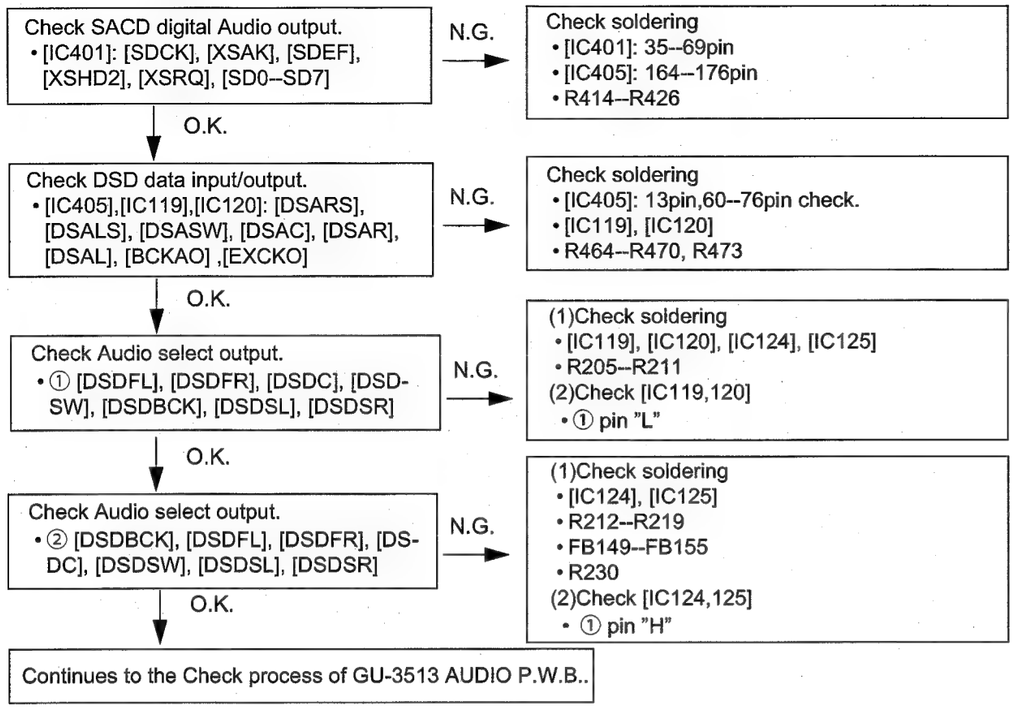


1.4. 音が出ない、ノイズが出る。

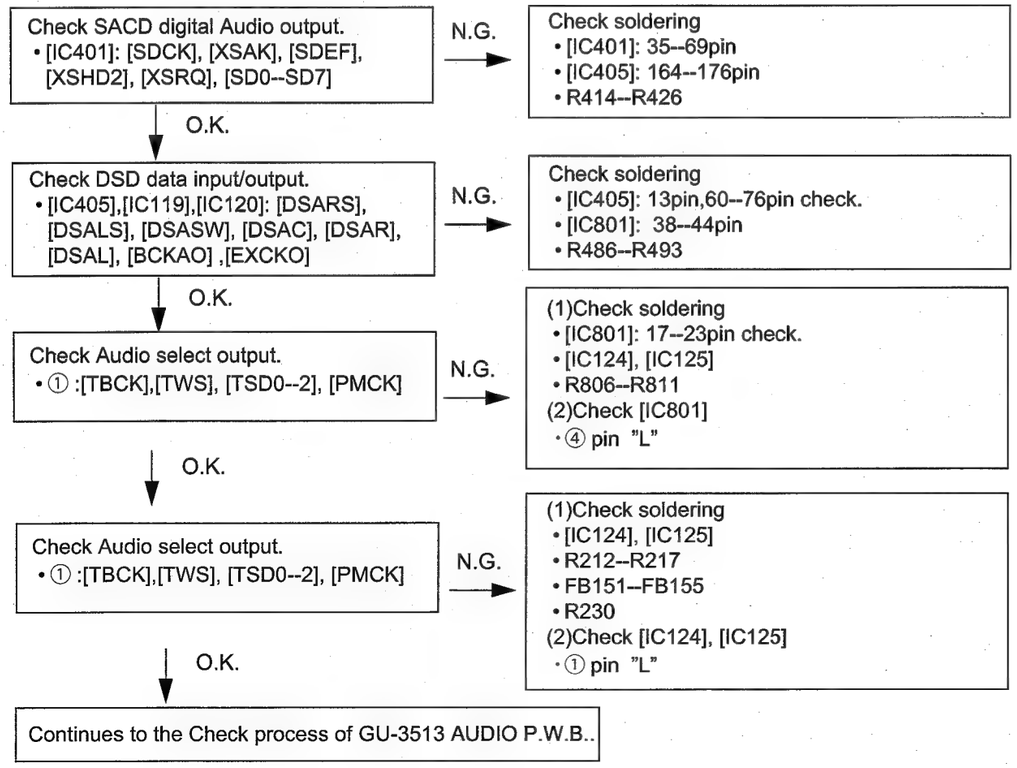
(1) DVD-VIDEO / AUDIO, CD



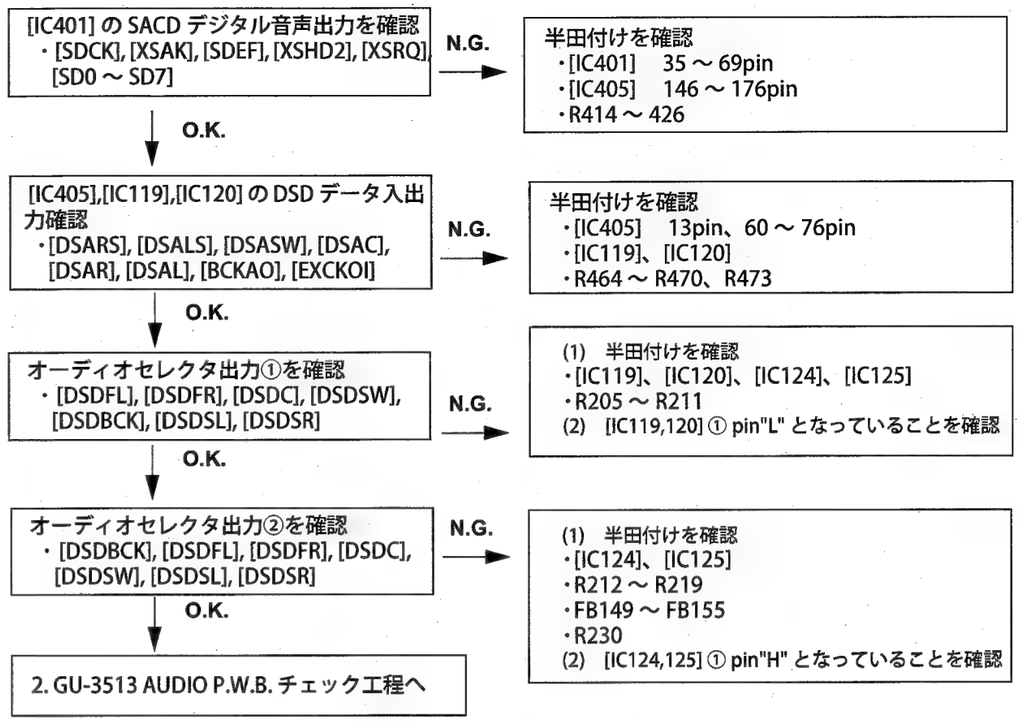
(2) SACD (SOURCE DIRECT ON)



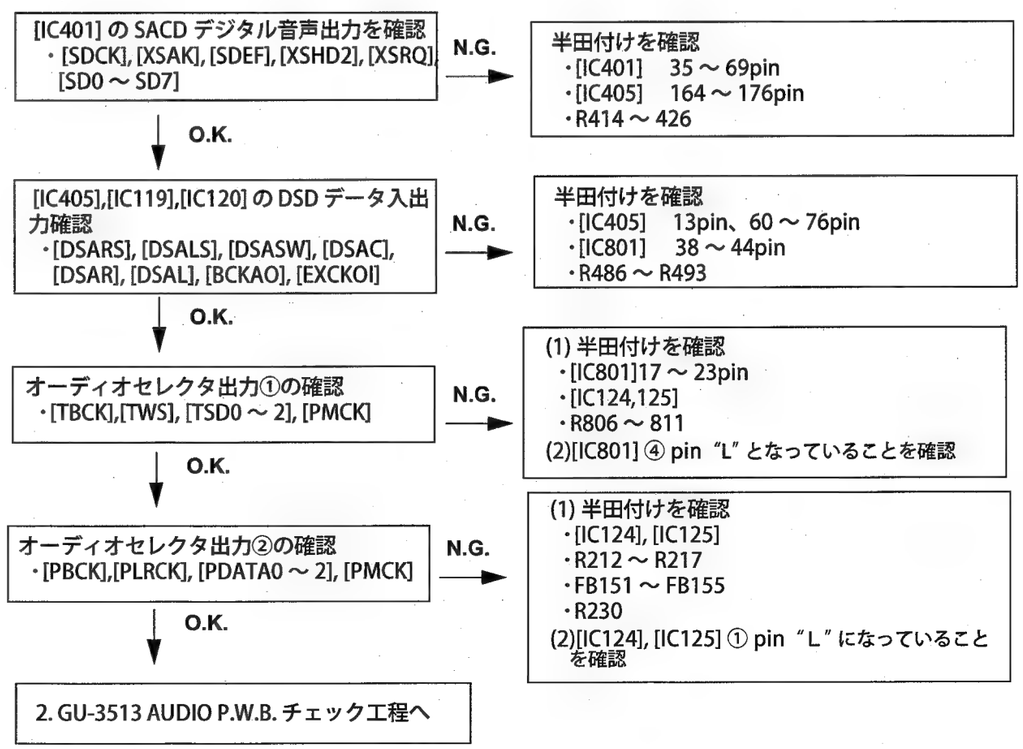
(3) SACD (SOURCE DIRECT OFF)



(2) SACD (SOURCE DIRECT ON 時)



(3) SACD (SOURCE DIRECT OFF 時)



2. GU-3513 AUDIO PART

2.1. No sound, Noise generated

Check digital Audio data

Check digital Audio data from Mecha unit (GU-3512)

CX301	PIN name	PCM DATA (CD,DVD・・・)	PIN name	SACD IEEE1394
2	PMCK/DSDMCK	MCK	MCK	MCK
4	PBCK/DSDBCK	BCK	BCK	IOUT0
6	PLRCK/DSDFL	LRCK	FL DATA	IOUT1
8	PDATA0/DSDFR	FL/FR	FR DATA	IOUT2
10	PDATA1/DSDC	SL/SR	C DATA	IOUT3
12	PDATA2/DSDSW	C/SW	SW DATA	IOUT4
14	PDATA3/DSDSL	MIXL/R	SL DATA	IOUT5
16	PDATA4/DSDSR	-	SR DATA	IANCO
18	DSDMIXL	-	MIX L DATA	-
20	DSDMIXR	-	MIX R DATA	-
26	PLL_MCK	MCK	MCK	MCK

<Check Point>

N.G. → Mecha unit (GU-3512)

O.K.

Check digital Audio data input to DAC

IC503	PIN name	PCM DATA (CD,DVD・・・)	PIN name
4	PLRCK_DSDSR	LRCK	SR DATA
5	PFLFR_DSDSL	FL/FR DATA	SL DATA
6	PDATA0/DSDFR	BCK	-
7	PMCK_DSDBCK	MCK	BCK

N.G. → IC404,DSP unit(1U-3426)

IC504 or IC505	PIN name	PCM DATA (CD,DVD・・・)	PIN name
1	DSD FL or C	-	FL or C DATA
2	DSD FR or SW	-	FR or SW DATA
3	DSDBCK	-	BCK
4	PLRCK	LRCK	-
5	PSLSR or CSW	FL/FR DATA	-
6	PBCK	BCK	-
7	PMCK	MCK	BCK

O.K.

Check Analog signal from DAC

N.G. → IC513-IC516,IC519,IC520 ① pin

O.K.

Check Relay circuit

N.G. → RL501,RL502 DSDSEL(PCM:L/SACD:H)

O.K.

Check Mute circuit

N.G. → AMUTE,EMUTE,ZEROL(IC503-①), ZEROR(IC503-②)

O.K.

Check LINE out Jack

N.G. → JK501,JK502

2.GU-3513 AUDIO PART

2.1. オーディオ出力端子から音が出ない、ノイズが発生する。

デジタル音声データの確認

メカユニット (GU-3512) から信号が出てきているか

CX301	端子名	PCM DATA (CD,DVD など)	SACD IEEE1394 以外	SACD IEEE1394 時
2	PMCK/DSDMCK	MCK	MCK	MCK
4	PBCK/DSDBCK	BCK	BCK	IOUT0
6	PLRCK/DSDFL	LRCK	FL DATA	IOUT1
8	PDATA0/DSDFR	FL/FR	FR DATA	IOUT2
10	PDATA1/DSDC	SL/SR	C DATA	IOUT3
12	PDATA2/DSDSW	C/SW	SW DATA	IOUT4
14	PDATA3/DSDSL	MIXL/R	SL DATA	IOUT5
16	PDATA4/DSDSR	-	SR DATA	IANCO
18	DSDMIXL	-	MIX L DATA	-
20	DSDMIXR	-	MIX R DATA	-
26	PLL_MCK	MCK	MCK	MCK

＜確認部分＞

N.G. → メカユニットの確認

O.K.

DAC に信号は入っているか

IC503	端子名	PCM DATA (CD,DVD など)	SACD IEEE1394 以外
4	PLRCK_DSDSR	LRCK	SR DATA
5	PFLFR_DSDSL	FL/FR DATA	SL DATA
6	PDATA0/DSDFR	BCK	-
7	PMCK_DSDBCK	MCK	BCK

N.G. → IC404、DSP ユニット (1U-3426) の確認

IC504 or IC505	端子名	PCM DATA (CD,DVD など)	SACD IEEE1394 以外
1	DSD FL or C	-	FL or C DATA
2	DSD FR or SW	-	FR or SW DATA
3	DSDBCK	-	BCK
4	PLRCK	LRCK	-
5	PSLSR or CSW	FL/FR DATA	-
6	PBCK	BCK	-
7	PMCK	MCK	BCK

O.K.

DAC のアナログ出力が出ているか

N.G. → IC513-IC516,IC519,IC520 ① pin

O.K.

リレーは動作しているか

N.G. → RL501,RL502 DSDSEL(PCM:L/SACD:H)

O.K.

MUTE は動作しているか

N.G. → AMUTE,EMUTE,ZEROL(IC503-①)、ZEROR(IC503-②)

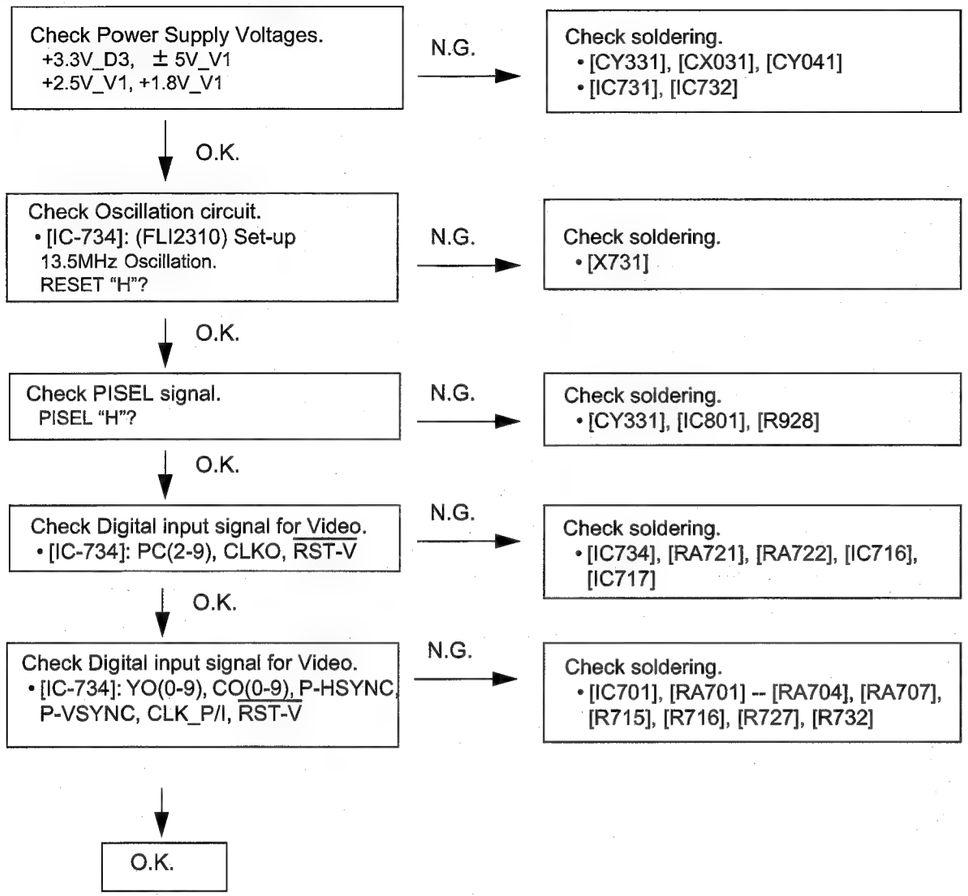
O.K.

出力端子の半田付けは

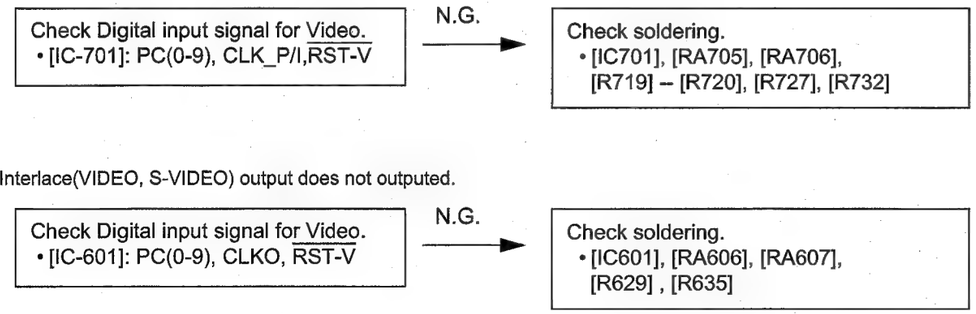
N.G. → JK501,JK502

3. GU-3514 VIDEO P.W.B.

(1) Progressive output does not outputed.



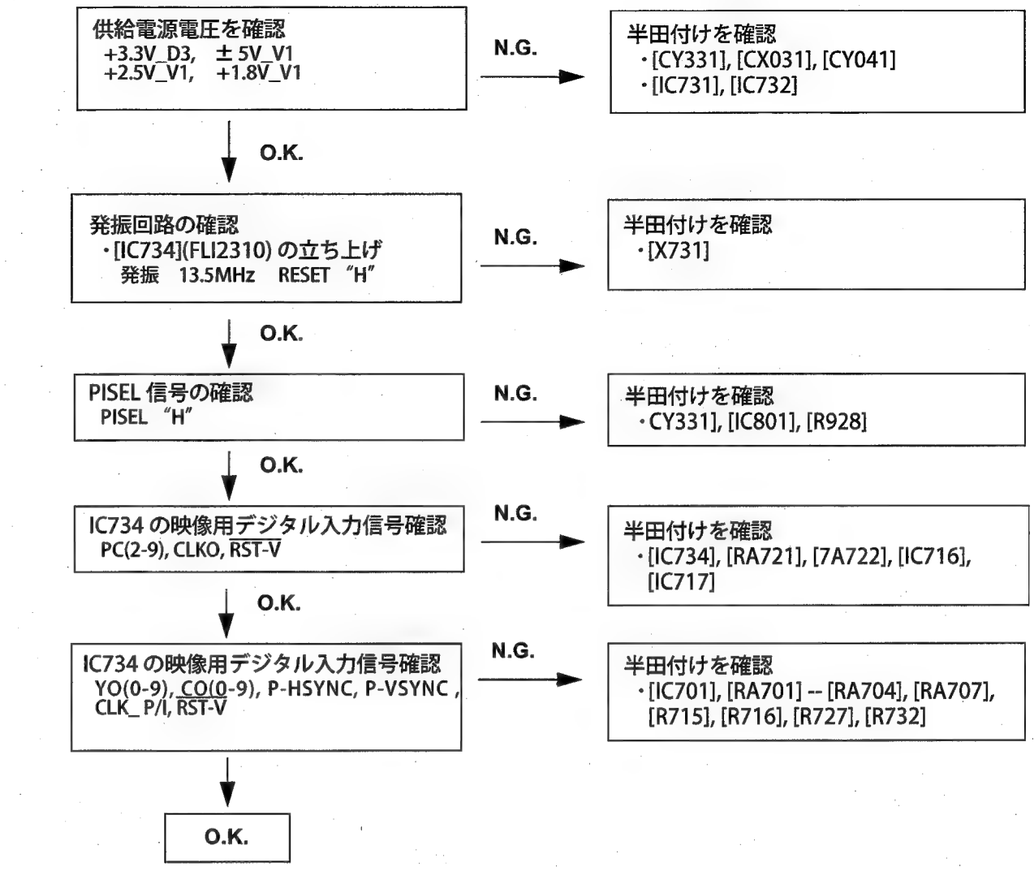
(2) Interlace(Component) output does not outputed.



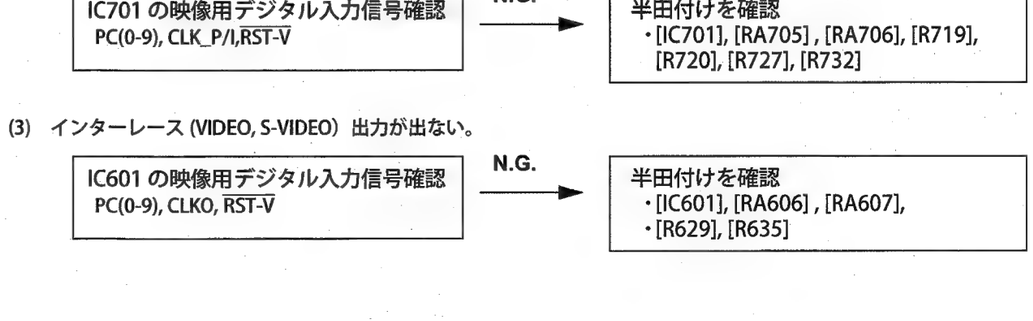
(3) Interlace(VIDEO, S-VIDEO) output does not outputed.

3.GU-3514 VIDEO P.W.B.

(1) プログレッシブ出力が出ない。



(2) インターレース (コンポーネント) 出力が出ない。



(3) インターレース (VIDEO, S-VIDEO) 出力が出ない。

ELECTRICAL ADJUSTMENT FOR VIDEO

1. SETTING

(1) Connect the monitor TV to the video output terminal.
(2) Connect the oscilloscope to the Y-signal and C-signal of S-VIDEO output terminal and each terminate at 75 Ohms.
(3) Connect the oscilloscope to the Y-signal, PB-signal and PR-signal of Component video output BNC terminal and each terminate at 75 Ohms.
※ **Use the 75 Ohms resistance must be 1%**
(4) DVD test disc : DVDT-S01

2. BEFORE ADJUSTMENT

2.1. Setting the Oscilloscope as below.

(1) PB/PR
(a) TIME/DIV : 20μS
(b) VOLT/DIV : 100mV
(Use the probe : x10)
(2) Y/C
(a) TIME/DIV : 20μS
(b) VOLT/DIV : 50mV
(Use the probe : x10)
Power on. Power Supply
USA & Canada : 120V
Europe : 230V
Japan : 100V

2.2. Preparation

(1) power on.
(2) Push [OPEN/CLOSE] button, then open the Disc Tray.
(3) Set DVD test disc (DVDT-S01) on the Disc Tray, and then push [CLOSE] button.
(4) FL display appear "STOP", push [PLAY] button to play-back DVD.
(5) Push the [DISPLAY] button of remote control unit and then appear the ON-Screen Display (GUI) on the monitor TV.
(6) Push the [+10] and [2] button, select title 12 of DVD.
(7) Push the [ENTER] button, playback title 12. (color bar 75%)

ビデオ回路の調整

1. セッティング手順

(1) セットの VIDEO OUT 端子にテレビモニターを接続する。
(2) セットの S2 VIDEO OUT 端子から Y 信号と C 信号をそれぞれオシロスコープ（終端抵抗：75Ω）に接続する。
(3) セットの COMPONENT VIDEO OUT の BNC 端子（Y/PB/PR）をそれぞれオシロスコープ（終端抵抗：75Ω）に接続する。
※ 75Ω 抵抗は 1%品を使用する事。
(4) DVD テストディスク：DVDT-S01 を用意する。

2. 調整のまえに

2.1. オシロスコープを下記に設定する。

(1) PB/PR
(a) TIME/DIV : 20μS
(b) VOLT/DIV : 100mV
（プローブ x10 使用）
(2) Y/C
(a) TIME/DIV : 20μS
(b) VOLT/DIV : 50mV
（プローブ x10 使用）
電源電圧 : 100V

2.2. 準備手順

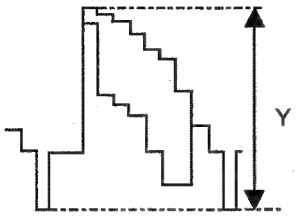
(1) セットの AC コードをコンセントへ挿入し、セットの電源を ON する。
(2) セットの「OPEN/CLOSE」ボタンを押しトレイを開き、トレイ上に DVD テストディスク（DVDT-S1）をセット後、「CLOSE」ボタンを押す。
(3) セット表示管上に "STOP" が表示されてから、PLAY ボタンを押し、ディスクを再生する。
(4) リモコンの DISPLAY ボタンを押しグラフィカル・ユーザー・インターフェイス (GUI) 画面を出す。
(5) 番号ボタンの [+10][2] ボタンを押し、Title 12 を選択する。
(6) 「ENTER」ボタンを押し、Title 12 を再生する（75%カラーバー信号）。

2.3. Procedure

(1) Adjust the signal of S-VIDEO out by the wave of oscilloscope.

(a) Target, Y-signal

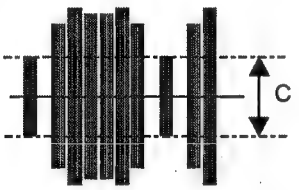
Point : VR702
Adjustment Value : 1000 ± 20mV
Waveform



Y-signal of S-VIDEO out

(b) Target, C-signal

Point : VR703
Adjustment Value : 286 ± 5mV
Waveform

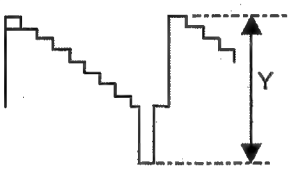


C-signal of S-VIDEO out

(2) Adjust the signal of COMPONENT OUT by the wave of oscilloscope.

(a) Target, Y-signal

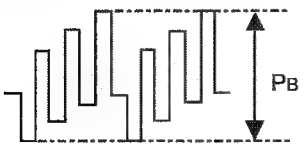
Point : VR704
Adjustment Value : 1000 ± 20mV
Waveform



Y signal

(b) Target, PB-signal

Point : VR705
Adjustment Value : *525 ± 10mV
Waveform



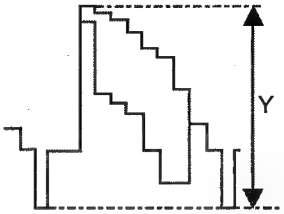
PB-signal

2.3. 手順

(1) セットの S2 VIDEO OUT の信号レベルをオシロスコープ上の波高値で調整する。

(a) Y 信号レベル

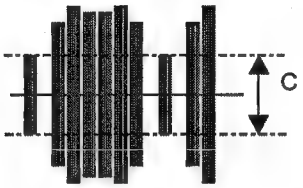
調整個所 : VR702
調整値 : 1000 ± 20mV
波形



S2 VIDEO OUT の Y 信号レベル

(b) C 信号レベル

調整個所 : VR703
調整値 : 286 ± 5mV
波形

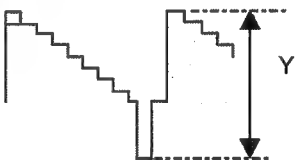


S2 VIDEO OUT の C 信号レベル

(2) COMPONENT OUT の信号レベルをオシロスコープ上の波高値で調整する。

(a) Y 信号レベル

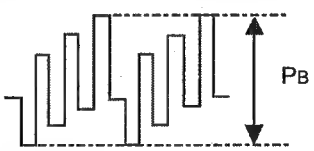
調整個所 : VR704
調整値 : 1000 ± 20mV
波形



プログレッシブ

(b) PB 信号レベル

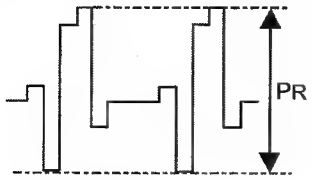
調整個所 : VR705
調整値 : 525 ± 10mV
波形



PB 信号レベル

(c) Target, PR-signal

Point	:	VR706
Adjustment Value	:	*525 ± 10mV
Waveform		

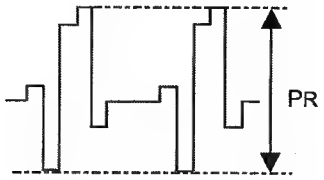


PR-signal

* : 486 ± 10mV for U.S.A. & Canada model

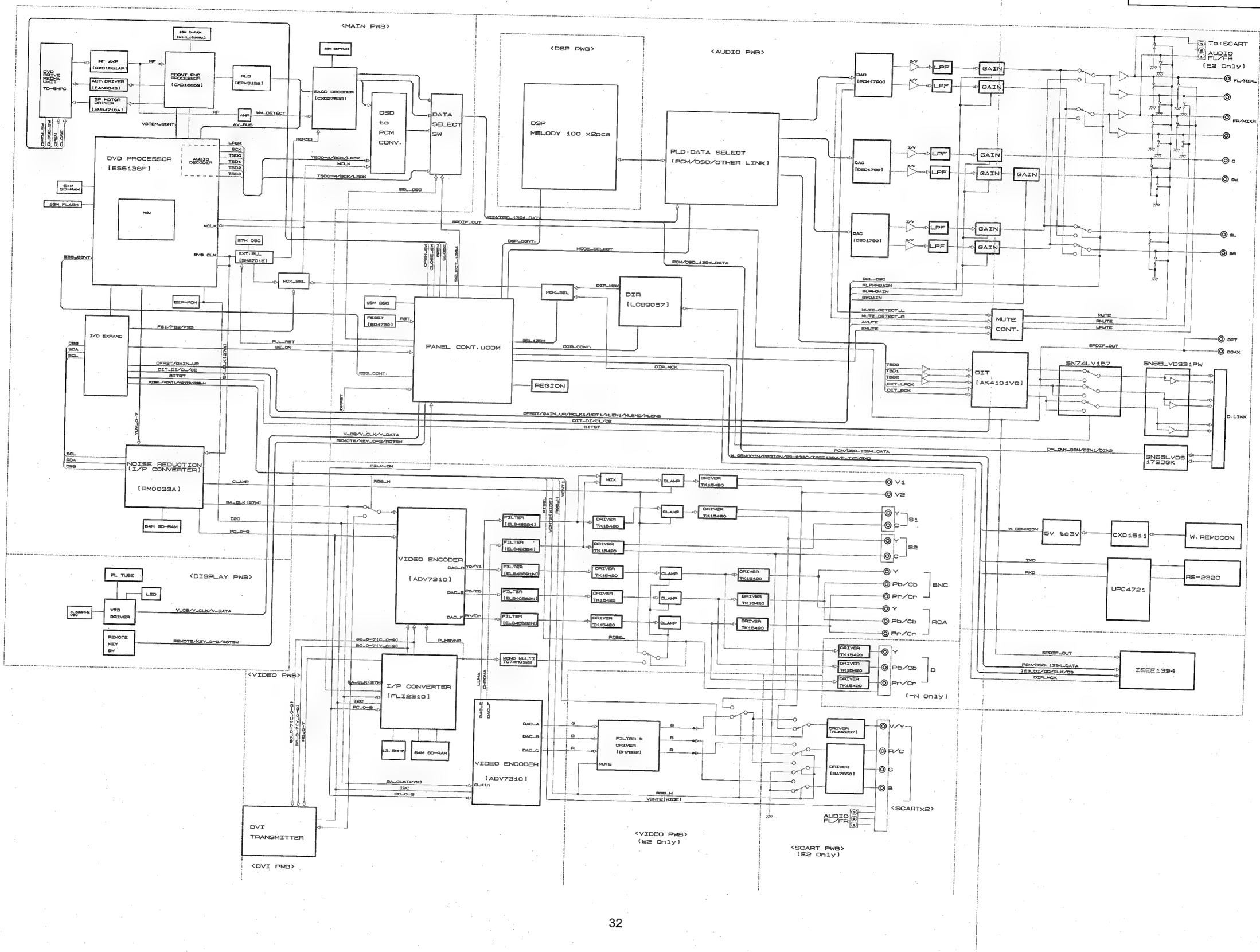
(c) PR 信号レベル

調整個所	: VR706
調整値	: 525 ± 10mV
波形	



PR- 信号レベル

BLOCK DIAGRAM



SEMICONDUCTORS / 半導体一覧表

Only major IC's are shown, general IC's etc. are omitted to list.
主な半導体を記載しています。汎用の半導体等は記載を省略しています。

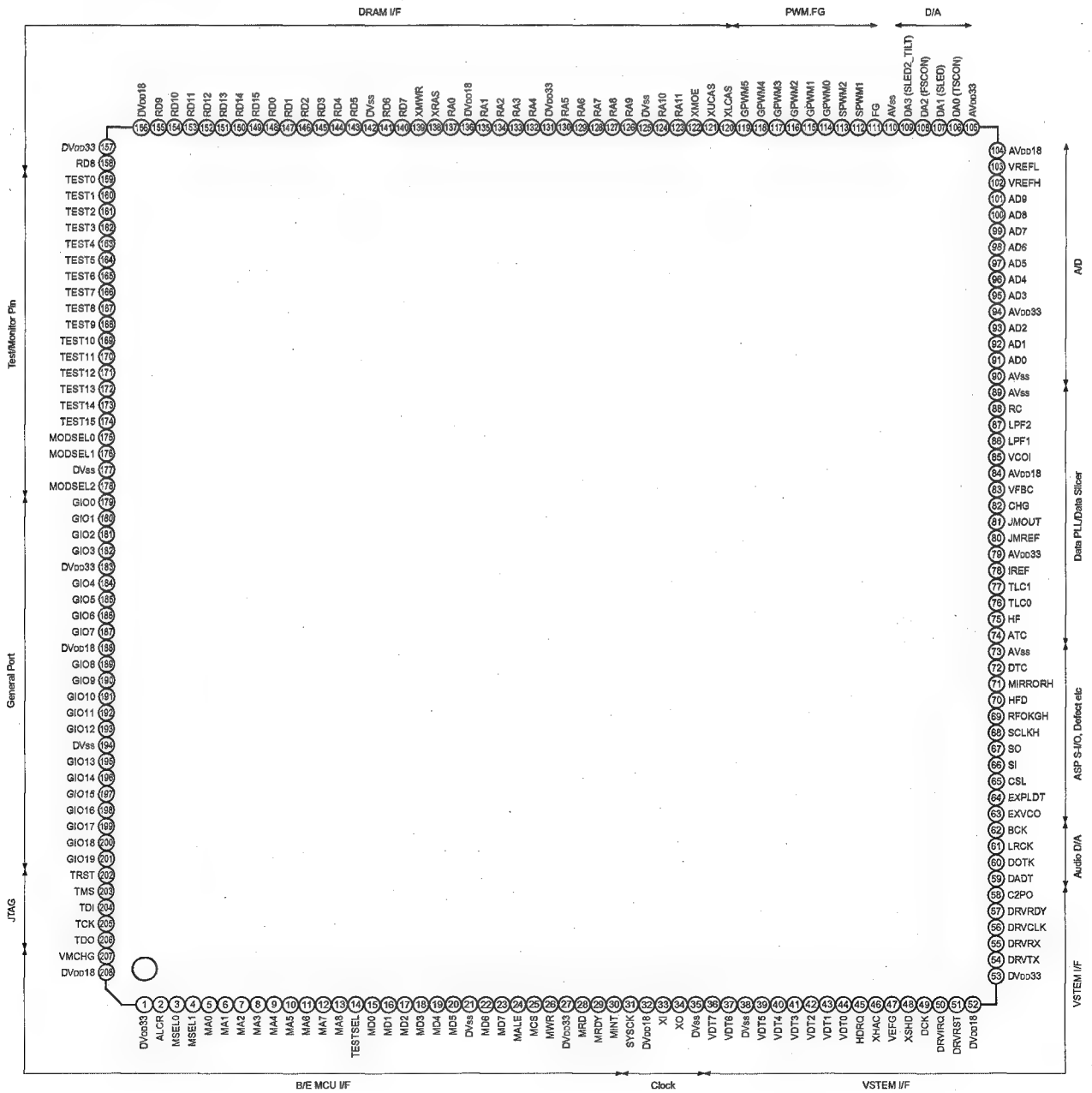
● IC's

Note: Abbreviation ahead of IC No. indicates the name of P.W.B., etc.
注) : IC No. の前の記号は、基板の名称を表します。

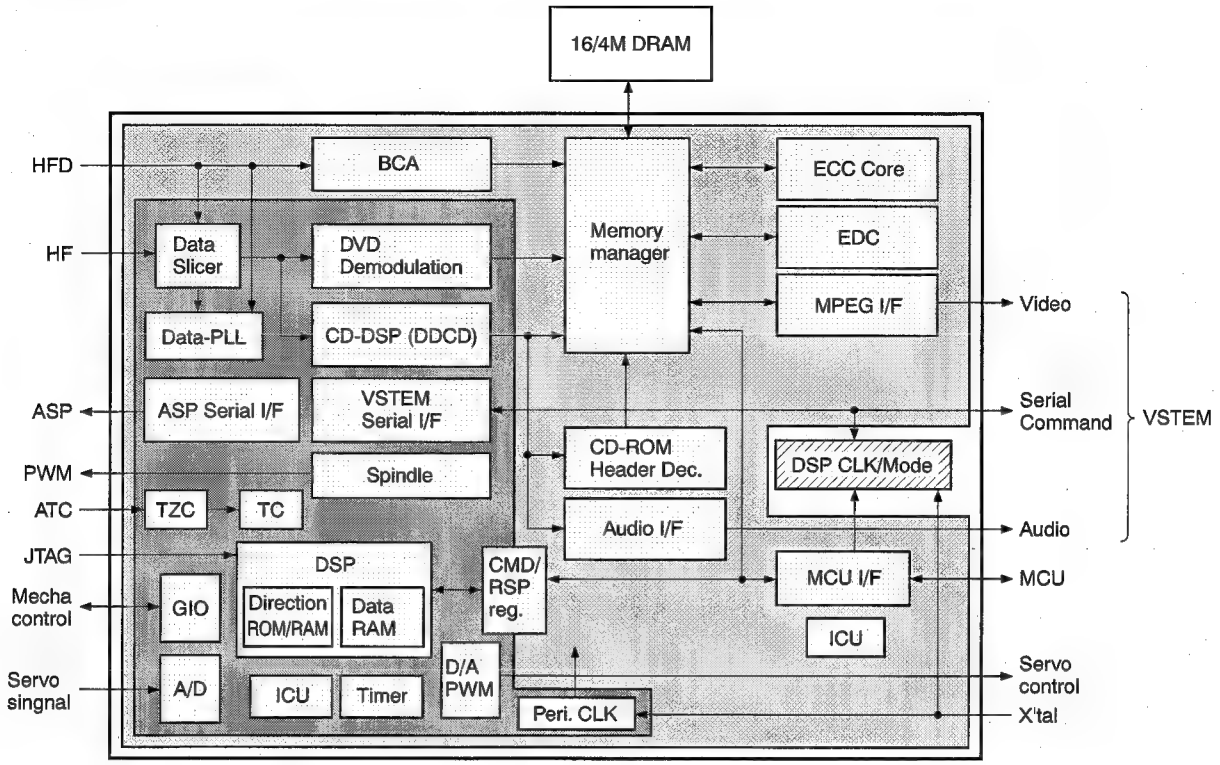
DS : DSP P.W.B. PO: Power P.W.B.
MA: Main P.W.B. IE : IEEE1394 P.W.B.
AD: Audio/Display P.W.B. SC: Scart P.W.B.(for Europe model)
VI: Video P.W.B.

CXD1885Q(MA:IC507)

Top View



Block Diagram



Functions

(A/D : Analog/Digital, PU : Pull-up, PD : Pull-down, SMT=Schumitt)

No.	Terminal Name	I/O	A/D	Classification	Function	PU	PD	SMT
1	DVDD33	P		VDD & GND	Digital 3.3V Power for I/O.			
2	ALCR	I	D	MCU I/F	Chip select input. (L: Reset)	*		*
3	MSEL0	I	D	MCU I/F	MCU I/F mode select 0.			*
4	MSEL1	I	D	MCU I/F	MCU I/F mode select 1.			*
5	MA0	I/O	D	MCU I/F	MCU Adress input 0 / data I/O 0 <LSB>.			*
6	MA1	I/O	D	MCU I/F	MCU Adress input 1 / data I/O 1.			*
7	MA2	I/O	D	MCU I/F	MCU Adress input 2 / data I/O 2.			*
8	MA3	I/O	D	MCU I/F	MCU Adress input 3 / data I/O 3.			*
9	MA4	I/O	D	MCU I/F	MCU Adress input 4 / data I/O 4.			*
10	MA5	I/O	D	MCU I/F	MCU Adress input 5 / data I/O 5.			*
11	MA6	I/O	D	MCU I/F	MCU Adress input 6 / data I/O 6.			*
12	MA7	I/O	D	MCU I/F	MCU Adress input 7 / data I/O 7.			*
13	MA8	I	D	MCU I/F	MCU Adress input 8 <MSB>.			*
14	TESTSEL	I	D	MCU I/F	TEST Select input.			*
15	MD0	I/O	D	MCU I/F	MCU data I/O 0 <LSB>.			*
16	MD1	I/O	D	MCU I/F	MCU data I/O 1.			*
17	MD2	I/O	D	MCU I/F	MCU data I/O 2.			*
18	MD3	I/O	D	MCU I/F	MCU data I/O 3.			*
19	MD4	I/O	D	MCU I/F	MCU data I/O 4.			*
20	MD5	I/O	D	MCU I/F	MCU data I/O 5.			*
21	DVss	P		VDD & GND	Digital Ground.			
22	MD6	I/O	D	MCU I/F	MCU data I/O 6.			*
23	MD7	I/O	D	MCU I/F	MCU data I/O 7 <MSB>.			*
24	MALE	I	D	MCU I/F	MCU Adress latch signal input.			*
25	MCS	I	D	MCU I/F	MCU Chip Select signal input.			*
26	MWR	I	D	MCU I/F	MCU Write strobe signal.			*
27	DVDD33	P		VDD & GND	digital 3.3V Power. (for I/O)			
28	MRD	I	D	MCU I/F	MCU Read Strobe signal.			*
29	MRDY	O	D	MCU I/F	MCU Ready signal. (L: Wait)			
30	MINT	O	D	MCU I/F	MCU Interrupt signal. (L: Interrupt request)			

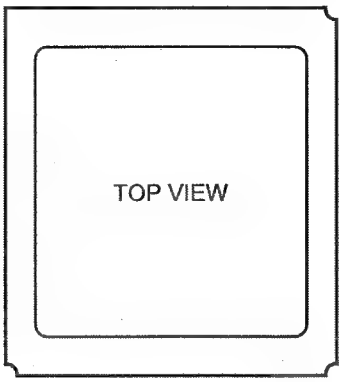
No.	Terminal Name	I/O	A/D	Classification	Function	PU	PD	SMT
31	SYSCK	O	D	Clock	Clock Monitor output.			
32	DVDD18	P		VDD & GND	Digital 1.8V Power. (Internal logic system power)			
33	XI	I	D	Clock	Crystal oscillation input.			
34	XO	O	D	Clock	Crystal oscillation output.			
35	DVSS	P		VDD & GND	Digital Ground.			
36	VDT7	O	D	VSTEM A/V	MPEG data output 7.			
37	VTD6	O	D	VSTEM A/V	MPEG data output 6.			
38	DVSS	P		VDD & GND	Digital Ground.			
39	VDT5	O	D	VSTEM A/V	MPEG data output 5.			
40	VDT4	O	D	VSTEM A/V	MPEG data output 4.			
41	VDT3	O	D	VSTEM A/V	MPEG data output 3.			
42	VDT2	O	D	VSTEM A/V	MPEG data output 2.			
43	VDT1	O	D	VSTEM A/V	MPEG data output 1.			
44	VDT0	O	D	VSTEM A/V	MPEG data output 0.			
45	HDRQ	I	D	VSTEM A/V	MPEG data Request input.	*		
46	XHAC	O	D	VSTEM A/V	Data Valid output.			
47	VEFG	O	D	VSTEM A/V	ECC Error-sector Flag output. (L: error sector)			
48	XSHD	O	D	VSTEM A/V	DVD Sector Head Flag output.			
49	DCK	O	D	VSTEM A/V	Data Strobe output.			
50	DRVIRQ	O	D	VSTEM Command	Interrupt Request output for Host. (L: interruption is demanded)			
51	DRVRST	I	D	VSTEM Command	Drive H/W Reset input. (L: reset)	*		*
52	DVDD18	P		VDD & GND	Digital 1.8V power for Internal logic system.			
53	DVDD33	P		VDD & GND	Digital 3.3V Power for I/O.			
54	DRVTX	O	D	VSTEM Command	Transmitting serial data output to Host.			
55	DRVRX	I	D	VSTEM Command	Reception serial data input from Host.			
56	DRVCLK	I	D	VSTEM Command	Clock input from Host.			*
57	DRVRDY	O	D	VSTEM Command	Drive Ready signal output. (L: ready)			
58	C2PO	O	D	Audio I/F	CD-DSP C2 Pointer output.			
59	DADT	O	D	Audio I/F	Audio serial data output.			
60	DOTX	O	D	Audio I/F	Digital audio output.			
61	LRCK	O	D	Audio I/F	L/R Clock output.			
62	BCK	O	D	Audio I/F	Audio Bit Clock output.			
63	EXVCO	I	D	TEST/Monitor	External Channel clock input.			
64	EXPLDT	I	D	TEST/Monitor	External RF data input. (Logic level)			
65	CSL	O	D	ASP I/F	SIO for RF signal processing LSI control. Latch signal output.			
66	SI	I	D	ASP I/F	SIO for RF signal processing LSI control. Serial data input.			
67	SO	O	D	ASP I/F	SIO for RF signal processing LSI control. Serial data output.			
68	SCLKH	O	D	ASP I/F	SIO for RF signal processing LSI control. Serial clock output.			
69	RFOKGH	I	D	ASP I/F	RF O.K. Signal input.			*
70	HFD	I	D	ASP I/F	RF lack Signal input.			*
71	MIRRORH	I	D	ASP I/F	Mirror detected signal input.(H: Mirror detected)			*
72	DTC	I	D	ASP I/F	Track cross signal input. (Logic level input)			*
73	AVSS	P		VDD & GND	Analog Ground.			
74	ATC	I	A	Data PLL	Track Cross signal input. (Analog level input)			
75	HF	I	A	Data PLL	RF signal input.			
76	TLC0	O	A	Data PLL	Asymmetry Charge-pump output 0.			
77	TLC1	O	A	Data PLL	Asymmetry Charge-pump output 1			
78	IREF	I	A	Data PLL	Reference current setting terminal for Asymmetry Circuit.			
79	AVDD33	P		VDD & GND	Analog 3.3V Power.			
80	JMREF	I	A	Data PLL	Reference current setting terminal for Jitter Monitor			
81	JMOUT	O	A	Data PLL	Jitter Monitor output.			
82	CHG	I	A	Data PLL	Reference current setting terminal for data PLL.			
83	VFBC	I	A	Data PLL	VCO offset frequency setting terminal for data PLL.			
84	AVDD18	P		VDD & GND	Analog 1.8V Power.			
85	VCOI	I	A	Data PLL	VCO Control voltage input terminal for data PLL.			
86	LPF1	O	A	Data PLL	VCO Loop-filter connection terminal 1 for data PLL.			
87	LPF2	O	A	Data PLL	VCO Loop-filter connection terminal 2 for data PLL			
88	RC	I	A	Data PLL	VCO gain setting terminal for data PLL.			
89	AVSS	P		VDD & GND	Analog Ground.			
90	AVSS	P		VDD & GND	Analog Ground.			
91	AD0	I	A	ADC	AD0 Input.			

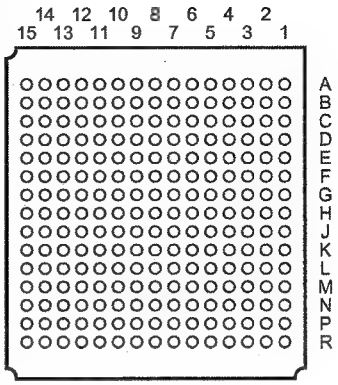
No.	Terminal Name	I/O	A/D	Classification	Function	PU	PD	SMT
92	AD1	I	A	ADC	AD1 Input.			
93	AD2	I	A	ADC	AD2 Input.			
94	AVDD33	P		VDD & GND	Analog 3.3V Power.			
95	AD3	I	A	ADC	AD3 Input.			
96	AD4	I	A	ADC	AD4 Input.			
97	AD5	I	A	ADC	AD5 Input.			
98	AD6	I	A	ADC	AD6 Input.			
99	AD7	I	A	ADC	AD7 Input.			
100	AD8	I	A	ADC	AD8 Input.			
101	AD9	I	A	ADC	AD9 Input.			
102	VREFH	I/O	A	ADC	Max Reference Voltage input for ADC. (Internal Reference Voltage mode, it will be an output state)			
103	VREFL	I/O	A	ADC	Min Reference Voltage input for ADC. (Internal Reference Voltage mode, it will be an output state)			
104	AVDD18	P		VDD & GND	Analog 1.8V Power.			
105	AVDD33	P		VDD & GND	Analog 3.3V Power.			
106	DA0 (TSCON)	O	A	DAC	DA0 output. (Track Servo output)			
107	DA1 (SLED)	O	A	DAC	DA1 output. (Sled Servo output)			
108	DA2 (FSCON)	O	A	DAC	DA2 output. (Forcus Servo output)			
109	DA3 (SLED2_ TILT)	O	A	DAC	DA3 output. (Sled Servo / Tilt Servo output)			
110	AVss	P		VDD & GND	Analog Ground			
111	FG	I	D	SPM	FG signal input.			*
112	SPWM1	O	D	SPM	Spindle motor PWM output 1.			
113	SPWM2	O	D	SPM	Spindle motor PWM output 2.			
114	GPWM0	O	D	General PWM	Multi-purpose PWM output 0.			
115	GPWM1	O	D	General PWM	Multi-purpose PWM output 1.			
116	GPWM2	O	D	General PWM	Multi-purpose PWM output 2.			
117	GPWM3	O	D	General PWM	Multi-purpose PWM output 3.			
118	GPWM4	O	D	General PWM	Multi-purpose PWM output 4.			
119	GPWM5	O	D	General PWM	Multi-purpose PWM output 5.			
120	XLCAS	O	D	DRAM I/F	DRAM LCAS output. (Low-Byte row address strobe output)			
121	XUCAS	O	D	DRAM I/F	DRAM UCAS output. (Upper-Byte row address strobe output)			
122	XMOE	O	D	DRAM I/F	DRAM output enable.			
123	RA11	O	D	DRAM I/F	DRAM address output terminal 11.			
124	RA10	O	D	DRAM I/F	DRAM address output terminal 10.			
125	DVss	P		VDD & GND	Digital Ground.			
126	RA9	O	D	DRAM I/F	DRAM address output terminal 9.			
127	RA8	O	D	DRAM I/F	DRAM address output terminal 8.			
128	RA7	O	D	DRAM I/F	DRAM address output terminal 7.			
129	RA6	O	D	DRAM I/F	DRAM address output terminal 6.			
130	RA5	O	D	DRAM I/F	DRAM address output terminal 5.			
131	DVDD33	P		VDD & GND	Digital 3.3V Power. (for I/O)			
132	RA4	O	D	DRAM I/F	DRAM address output terminal 4.			
133	RA3	O	D	DRAM I/F	DRAM address output terminal 3.			
134	RA2	O	D	DRAM I/F	DRAM address output terminal 2.			
135	RA1	O	D	DRAM I/F	DRAM address output terminal 1.			
136	DVDD18	P		VDD & GND	Digital 1.8V Power. (for Internal Logic power)			
137	RA0	O	D	DRAM I/F	DRAM address output terminal 0.			
138	XRAS	O	D	DRAM I/F	DRAM RAS output. (Column address strobe output)			
139	XMWR	O	D	DRAM I/F	DRAM Write enable.			
140	RD7	I/O	D	DRAM I/F	DRAM data input/output terminal 7.	*		
141	RD6	I/O	D	DRAM I/F	DRAM data input/output terminal 6.	*		
142	DVss	P		VDD & GND	Digital Ground.			
143	RD5	I/O	D	DRAM I/F	DRAM data input/output terminal 5.	*		
144	RD4	I/O	D	DRAM I/F	DRAM data input/output terminal 4.	*		
145	RD3	I/O	D	DRAM I/F	DRAM data input/output terminal 3.	*		
146	RD2	I/O	D	DRAM I/F	DRAM data input/output terminal 2.	*		
147	RD1	I/O	D	DRAM I/F	DRAM data input/output terminal 1.	*		
148	RD0	I/O	D	DRAM I/F	DRAM data input/output terminal 0.	*		
149	RD15	I/O	D	DRAM I/F	DRAM data input/output terminal 15.	*		

No.	Terminal Name	I/O	A/D	Classification	Function	PU	PD	SMT
150	RD14	I/O	D	DRAM I/F	DRAM data input/output terminal 14.	*		
151	RD13	I/O	D	DRAM I/F	DRAM data input/output terminal 13.	*		
152	RD12	I/O	D	DRAM I/F	DRAM data input/output terminal 12.	*		
153	RD11	I/O	D	DRAM I/F	DRAM data input/output terminal 11.	*		
154	RD10	I/O	D	DRAM I/F	DRAM data input/output terminal 10.	*		
155	RD9	I/O	D	DRAM I/F	DRAM data input/output terminal 9.	*		
156	DVDD18	P		VDD & GND	Digital 1.8V Power. (for internal Logic system)			
157	DVDD33	P		VDD & GND	Digital 3.3V power for I/O.			
158	RD8	I/O	D	DRAM I/F	DRAM data input/output terminal 8.	*		
159	TEST0	O	D	TEST/Monitor	TEST I/O 0.			
160	TEST1	O	D	TEST/Monitor	TEST I/O 1.			
161	TEST2	O	D	TEST/Monitor	TEST I/O 2.			
162	TEST3	O	D	TEST/Monitor	TEST I/O 3.			
163	TEST4	O	D	TEST/Monitor	TEST I/O 4.			
164	TEST5	O	D	TEST/Monitor	TEST I/O 5.			
165	TEST6	O	D	TEST/Monitor	TEST I/O 6.			
166	TEST7	O	D	TEST/Monitor	TEST I/O 7.			
167	TEST8	O	D	TEST/Monitor	TEST I/O 8.			
168	TEST9	O	D	TEST/Monitor	TEST I/O 9.			
169	TEST10	O	D	TEST/Monitor	TEST I/O 10.			
170	TEST11	O	D	TEST/Monitor	TEST I/O 11.			
171	TEST12	O	D	TEST/Monitor	TEST I/O 12.			
172	TEST13	O	D	TEST/Monitor	TEST I/O 13.			
173	TEST14	O	D	TEST/Monitor	TEST I/O 14.			
174	TEST15	O	D	TEST/Monitor	TEST I/O 15.			
175	MODSEL0	I	D	TEST/Monitor	TEST mode select 0. (GND, under normal conditions)			
176	MODSEL1	I	D	TEST/Monitor	TEST mode select 1. (GND, under normal conditions)			
177	DVss	P		VDD & GND	Digital Ground.			
178	MODSEL2	I	D	TEST/Monitor	TEST mode select 2. (GND, under normal conditions)			
179	GIO0	I/O	D	Multi-purpose	Multi-purpose port 0.		*	*
180	GIO1	I/O	D	Multi-purpose	Multi-purpose port 1.		*	*
181	GIO2	I/O	D	Multi-purpose	Multi-purpose port 2.		*	*
182	GIO3	I/O	D	Multi-purpose	Multi-purpose port 3.		*	*
183	DVDD33	P		VDD & GND	Digital 3.3V Power for I/O.			
184	GIO4	I/O	D	General Port	Multi-purpose port 4.		*	*
185	GIO5	I/O	D	General Port	Multi-purpose port 5.		*	*
186	GIO6	I/O	D	General Port	Multi-purpose port 6.		*	*
187	GIO7	I/O	D	General Port	Multi-purpose port 7.		*	*
188	DVDD18	P		VDD & GND	Digital 1.8V Power for I/O. (for internal Logic system)			
189	GIO8	I/O	D	General Port	Multi-purpose port 8.		*	*
190	GIO9	I/O	D	General Port	Multi-purpose port 9.	*	*	*
191	GIO10	I/O	D	General Port	Multi-purpose port 10.		*	*
192	GIO11	I/O	D	General Port	Multi-purpose port 11.		*	*
193	GIO12	I/O	D	General Port	Multi-purpose port 12.	*	*	*
194	DVss	P		VDD & GND	Digital Ground.			
195	GIO13	I/O	D	Multi-purpose	Multi-purpose port 13.	*	*	*
196	GIO14	I/O	D	General Port	Multi-purpose port 14.	*	*	*
197	GIO15	I/O	D	General Port	Multi-purpose port 15.	*	*	*
198	GIO16	I/O	D	General Port	Multi-purpose port 16.		*	*
199	GIO17	I/O	D	General Port	Multi-purpose port 17.		*	*
200	GIO18	I/O	D	General Port	Multi-purpose port 18.		*	*
201	GIO19	I/O	D	General Port	Multi-purpose port 19.		*	*
202	TRST	I	D	JTAG I/F	JTAG Reset input.		*	*
203	TMS	I	D	JTAG I/F	JTAG Mode Select input.	*		*
204	TDI	I	D	JTAG I/F	JTAG Data Input.	*		*
205	TCK	I	D	JTAG I/F	JTAG Clock input.	*		
206	TDO	O	D	JTAG I/F	JTAG Data output.			
207	VMCHG	I	D	MCU I/F	VSTEM / external MCU access selection terminal of system setting register for DSP. (L: VSTEM, H: external MCU)			
208	DVDD18	P		VDD & GND	Digital 1.8V power for internal Logic system.			

ADSST-MEL100-DVD(DS:IC801,901)

Note : When this IC is defecitive, replace P.W.B. Unit Ass'y





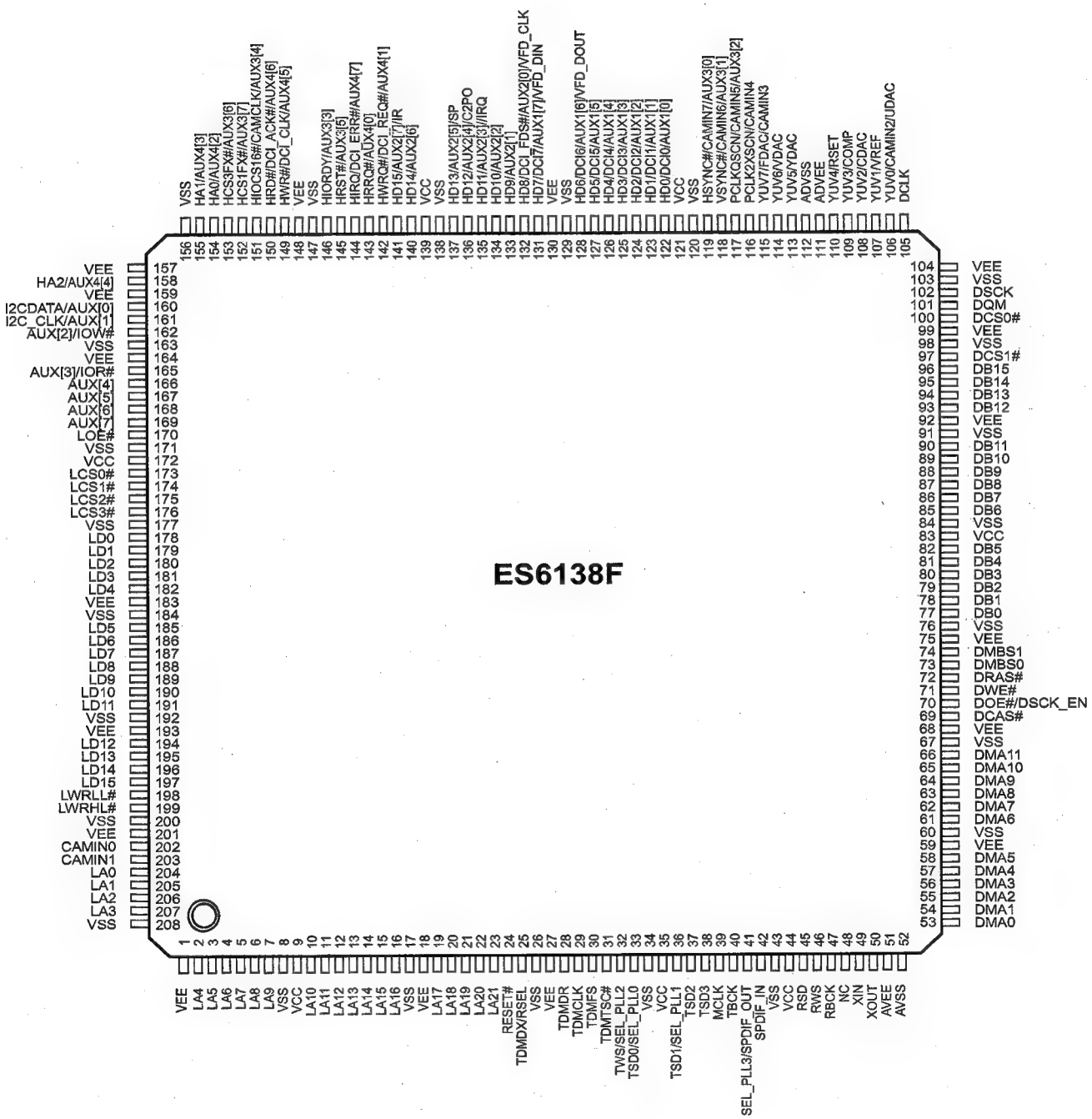
BOTTOM VIEW

ADSST-MEL100 Terminal Function

Pin Name	Pin No.	Pin Name	Pin No.	Pin Name	Pin No.	Pin Name	Pin No.	Pin Name	Pin No.	Pin Name	Pin No.
NC	A01	SFS0	B05	SFS3	C09	DATA[26]	J12	DATA[21]	K14	NC	R01
BMSTR	A02	SCLK1	B06	L0DAT[6]	C10	DATA[24]	J13	DATA[23]	K15	ADDR[11]	R02
BMS_B	A03	SD2B	B07	L1DAT[7]	C11	DATA[25]	J14	ADDR[13]	P01	ADDR[7]	R03
SPIDS	A04	SD3A	B08	L1DAT[3]	C12	DATA[27]	J15	ADDR[9]	P02	ADDR[3]	R04
EBOOT	A05	L0DAT[7]	B09	L1DAT[1]	C13	ADDR[14]	N01	ADDR[8]	P03	MS3_B	R05
LBOOT	A06	L0CLK	B10	DATA[45]	C14	ADDR[15]	N02	ADDR[4]	P04	PA_B	R06
SCLK2	A07	L0DAT[1]	B11	DATA[47]	C15	ADDR[10]	N03	MS2_B	P05	BR3_B	R07
SD3B	A08	L1DAT[4]	B12	FLAG1	G01	ADDR[5]	N04	SBTS_B	P06	RDL_B	R08
L0DAT[4]	A09	L1ACK	B13	FLAG2	G02	ADDR[1]	N05	BR4_B	P07	CLKOUT	R09
L0ACK	A10	L1DAT[0]	B14	FLAG4	G03	MS0_B	N06	BR1_B	P08	HBR_B	R10
L0DAT[2]	A11	NC	B15	FLAG3	G04	BR5_B	N07	SDCLK1	P09	HBG_B	R11
L1DAT[6]	A12	FLAG5	F01	VDDEXT	G05	BR2_B	N08	SDCLK0	P10	CLKDBL	R12
L1CLK	A13	FLAG7	F02	GND	G06	BRST	N09	REDY	P11	XTAL	R13
L1DAT[2]	A14	FLAG9	F03	GND	G07	SDCKE	N10	CLKIN	P12	SDWE_B	R14
NC	A15	FLAG6	F04	GND	G08	CS_B	N11	DQM	P13	NC	R15
FLAG10	E01	VDDINT	F05	GND	G09	CLK_CFG1	N12	AVSS	P14	DATA[31]	H15
RESET_B	E02	GND	F06	GND	G10	CLK_CFG0	N13	DMAR2_B	P15	ADDR[16]	M01
FLAG8	E03	GND	F07	VDDEXT	G11	AVDD	N14	DATA[32]	G15	ADDR[12]	M02
SD0A	E04	GND	F08	DATA[34]	G12	DMARI1_B	N15	ADDR[19]	L01	ADDR[18]	M03
VDDEXT	E05	GND	F09	DATA[35]	G13	DATA[36]	F15	ADDR[17]	L02	ADDR[6]	M04
VDDINT	E06	GND	F10	DATA[33]	G14	TIMEXP	K01	ADDR[21]	L03	ADDR[0]	M05
VDDEXT	E07	VDDINT	F11	DATA[41]	E15	ADDR[22]	K02	ADDR[2]	L04	MS1_B	M06
VDDINT	E08	DATA[37]	F12	IRQ2_B	J01	ADDR[20]	K03	VDDEXT	L05	BR6_B	M07
VDDEXT	E09	DATA[40]	F13	ID1	J02	ADDR[23]	K04	VDDINT	L06	VDDEXT	M08
VDDINT	E10	DATA[38]	F14	ID2	J03	VDDINT	K05	VDDEXT	L07	WRL_B	M09
VDDEXT	E11	TMS	C01	ID0	J04	GND	K06	VDDINT	L08	SDA10	M10
L0DAT[0]	E12	EMU_B	C02	VDDEXT	J05	GND	K07	VDDEXT	L09	RAS_B	M11
DATA[39]	E13	GND	C03	GND	J06	GND	K08	VDDINT	L10	ACK	M12
DATA[43]	E14	SPICLK	C04	GND	J07	GND	K09	VDDEXT	L11	DATA[17]	M13
TRST_B	B01	SD08	C05	GND	J08	GND	K10	CAS_B	L12	DMAG2_B	M14
TD1	B02	SD1A	C06	GND	J09	VDDINT	K11	DATA[20]	L13	DMAG1_B	M15
RPBA	B03	SD2A	C07	GND	J10	DATA[22]	K12	DATA[16]	L14		
MOSI	B04	SFS2	C08	VDDEXT	J11	DATA[19]	K13	DATA[18]	L15		

ES6138F (MA: IC108)

PINOUT DIAGRAM



ES6138F Pin Description

<table>
<tr><th>Name</th><th>Pin Numbers</th><th>I/O</th><th>Definition</th></tr>
<tr><td>VEE</td><td>1,18, 27, 59, 68, 75, 92, 99, 104, 130, 148, 157, 159, 164, 183, 193, 201</td><td>P</td><td>I/O power supply.</td></tr>
<tr><td>LA[21:0]</td><td>2:7, 10:16, 19:23, 204:207</td><td>O</td><td>RISC port address bus.</td></tr>
<tr><td>VSS</td><td>8, 17, 26, 34, 43, 60, 67, 76, 84, 91, 98, 103, 120, 129, 138, 147, 156, 163, 171, 177, 184, 192, 200, 208</td><td>G</td><td>Ground.</td></tr>
<tr><td>VCC</td><td>9, 35, 44, 83, 121, 139, 172</td><td>P</td><td>Core power supply.</td></tr>
<tr><td>RESET#</td><td>24</td><td>I</td><td>Reset input (active-low).</td></tr>
<tr><td>TDMDX</td><td rowspan="2">25</td><td>O</td><td>TDM transmit data output.</td></tr>
<tr><td>RSEL</td><td>I</td><td>LCS3 ROM Boot Data Width Select. Strapped to VCC or ground via 4.7-kΩ resistor; read only during reset.
<table>
<tr><th>RSEL</th><th>Selection</th></tr>
<tr><td>0</td><td>16-bit ROM</td></tr>
<tr><td>1</td><td>8-bit ROM</td></tr>
</table></td></tr>
<tr><td>TDMDR</td><td>28</td><td>I</td><td>TDM receive data input.</td></tr>
<tr><td>TDMCLK</td><td>29</td><td>I</td><td>TDM clock input.</td></tr>
<tr><td>TDMFS</td><td>30</td><td>I</td><td>TDM frame sync input.</td></tr>
<tr><td>TDMTSC#</td><td>31</td><td>O</td><td>TDM output enable (active-low).</td></tr>
<tr><td>TWS</td><td rowspan="2">32</td><td>O</td><td>Audio transmit frame sync output.</td></tr>
<tr><td>SEL_PLL2</td><td>I</td><td>System and DSCK output clock frequency selection is made at the rising edge of RESET#. The matrix below lists the available clock frequencies and their respective PLL bit settings. Strapped to VCC or ground via 4.7-kΩ resistor; read only during reset.
<table>
<tr><th>SEL_PLL2</th><th>SEL_PLL1</th><th>SEL_PLL0</th><th>PLL Settings</th></tr>
<tr><td>0</td><td>0</td><td>0</td><td>DCLK × 4.5</td></tr>
<tr><td>0</td><td>0</td><td>1</td><td>DCLK × 5.0</td></tr>
<tr><td>0</td><td>1</td><td>0</td><td>Bypass</td></tr>
<tr><td>0</td><td>1</td><td>1</td><td>DCLK × 4.0</td></tr>
<tr><td>1</td><td>0</td><td>0</td><td>DCLK × 4.25</td></tr>
<tr><td>1</td><td>0</td><td>1</td><td>DCLK × 4.75</td></tr>
<tr><td>1</td><td>1</td><td>0</td><td>DCLK × 5.5</td></tr>
<tr><td>1</td><td>1</td><td>1</td><td>DCLK × 6.0</td></tr>
</table></td></tr>
</table>

ES6138F Pin Description (Continued)

<table>
<tr><th>Name</th><th>Pin Numbers</th><th>I/O</th><th>Definition</th></tr>
<tr><td>TSD0</td><td rowspan="2">33</td><td>O</td><td>Audio transmit serial data port 0.</td></tr>
<tr><td>SEL_PLL0</td><td>I</td><td>Refer to the description and matrix for SEL_PLL2 pin 32.</td></tr>
<tr><td>TSD1</td><td rowspan="2">36</td><td>O</td><td>Audio transmit serial data port 1.</td></tr>
<tr><td>SEL_PLL1</td><td>I</td><td>Refer to the description and matrix for SEL_PLL2 pin 32.</td></tr>
<tr><td>TSD2</td><td>37</td><td>O</td><td>Audio transmit serial data output 2.</td></tr>
<tr><td>TSD3</td><td>38</td><td>O</td><td>Audio transmit serial data output 3.</td></tr>
<tr><td>NC</td><td>48</td><td>—</td><td>No connect pins. Leave open.</td></tr>
<tr><td>MCLK</td><td>39</td><td>I/O</td><td>Audio master clock for audio DAC.</td></tr>
<tr><td>TBCK</td><td>40</td><td>O</td><td>Audio transmit bit clock.</td></tr>
<tr><td>SEL_PLL3</td><td rowspan="2">41</td><td>I</td><td>Clock source select. Strapped to VCC or ground via 4.7-kΩ resistor; read only during reset.
<table><tr><th>SEL_PLL3</th><th>Clock Source</th></tr><tr><td>0</td><td>Crystal oscillator</td></tr><tr><td>1</td><td>DCLK input</td></tr></table></td></tr>
<tr><td>SPDIF_OUT</td><td>O</td><td>S/PDIF output.</td></tr>
<tr><td>SPDIF_IN</td><td>42</td><td>I</td><td>S/PDIF input.</td></tr>
<tr><td>RSD</td><td>45</td><td>I</td><td>Audio receive serial data.</td></tr>
<tr><td>RWS</td><td>46</td><td>I</td><td>Audio receive frame sync.</td></tr>
<tr><td>RBCK</td><td>47</td><td>I</td><td>Audio receive bit clock.</td></tr>
<tr><td>XIN</td><td>49</td><td>I</td><td>27-MHz crystal input.</td></tr>
<tr><td>XOUT</td><td>50</td><td>O</td><td>27-MHz crystal output.</td></tr>
<tr><td>AVEE</td><td>51</td><td>P</td><td>Analog power for PLL.</td></tr>
<tr><td>AVSS</td><td>52</td><td>G</td><td>Analog ground for PLL.</td></tr>
<tr><td>DMA[11:0]</td><td>53:58, 61:66</td><td>O</td><td>DRAM address bus.</td></tr>
<tr><td>DCAS#</td><td>69</td><td>O</td><td>DRAM column address strobe.</td></tr>
<tr><td>DOE#</td><td rowspan="2">70</td><td>O</td><td>DRAM output enable (active-low).</td></tr>
<tr><td>DSCK_EN</td><td>O</td><td>DRAM clock enable.</td></tr>
<tr><td>DWE#</td><td>71</td><td>O</td><td>DRAM write enable (active-low).</td></tr>
<tr><td>DRAS#</td><td>72</td><td>O</td><td>DRAM row address strobe (active-low).</td></tr>
<tr><td>DMBS0</td><td>73</td><td>O</td><td>DRAM bank select 0.</td></tr>
<tr><td>DMBS1</td><td>74</td><td>O</td><td>DRAM bank select 1.</td></tr>
<tr><td>DB[15:0]</td><td>77:82, 85:90, 93:96</td><td>I/O</td><td>DRAM data bus.</td></tr>
<tr><td>DCS[1:0]#</td><td>97,100</td><td>O</td><td>DRAM chip select (active-low).</td></tr>
<tr><td>DQM</td><td>101</td><td>O</td><td>Data input/output mask.</td></tr>
</table>

ES6138F Pin Description (Continued)

<table>
<tr><th>Name</th><th>Pin Numbers</th><th>I/O</th><th>Definition</th></tr>
<tr><td>DSCK</td><td>102</td><td>O</td><td>Output clock to DRAM.</td></tr>
<tr><td>DCLK</td><td>105</td><td>I</td><td>Clock input to PLL.</td></tr>
<tr><td>YUV0</td><td rowspan="3">106</td><td>O</td><td>YUV pixel 2 output data.</td></tr>
<tr><td>CAMIN2</td><td>I</td><td>Camera YUV 2.</td></tr>
<tr><td>UDAC</td><td>O</td><td>Video DAC output.
<table>
<tr><th>Pin</th><th>115</th><th>114</th><th>113</th><th>108</th><th>106</th></tr>
<tr><th>Value</th><th>F DAC</th><th>V DAC</th><th>Y DAC</th><th>C DAC</th><th>U DAC</th></tr>
<tr><td>0</td><td>CVBS/Chroma</td><td>CVBS1</td><td>Y</td><td>C</td><td>N/A</td></tr>
<tr><td>1</td><td>CVBS/Chroma</td><td>CVBS1</td><td>Y</td><td>C</td><td>CVBS2</td></tr>
<tr><td>2</td><td>CVBS/Chroma</td><td>N/A</td><td>Y</td><td>C</td><td>N/A</td></tr>
<tr><td>3</td><td>CVBS/Chroma</td><td>CVBS1</td><td>N/A</td><td>N/A</td><td>CVBS2</td></tr>
<tr><td>4</td><td>CVBS/Chroma</td><td>CVBS1</td><td>N/A</td><td>N/A</td><td>N/A</td></tr>
<tr><td>5</td><td>CVBS/Chroma</td><td>CVBS1</td><td>Y</td><td>Pb</td><td>Pr</td></tr>
<tr><td>6</td><td>CVBS/Chroma</td><td>N/A</td><td>Y</td><td>Pb</td><td>Pr</td></tr>
<tr><td>7</td><td>N/A</td><td>SYNC</td><td>G</td><td>B</td><td>R</td></tr>
<tr><td>8</td><td>CVBS/Chroma</td><td>Chroma</td><td>Y</td><td>Pb</td><td>Pr</td></tr>
<tr><td>9</td><td>CVBS</td><td>CVBS1</td><td>G</td><td>B</td><td>R</td></tr>
<tr><td>10</td><td>CVBS</td><td>CVBS1</td><td>G</td><td>R</td><td>B</td></tr>
<tr><td>11</td><td>N/A</td><td>SYNC</td><td>G</td><td>R</td><td>B</td></tr>
<tr><td>12</td><td>CVBS/Chroma</td><td>N/A</td><td>Y</td><td>Pr</td><td>Pb</td></tr>
<tr><td>13</td><td>CVBS/Chroma</td><td>CVBS1</td><td>Y</td><td>Pr</td><td>Pb</td></tr>
<tr><td>14</td><td>Chroma</td><td>Y</td><td>G</td><td>R</td><td>B</td></tr>
</table>
F: CVBS/chroma signal for simultaneous mode.
Y: Luma component for YUV and Y/C processing.
C: Chrominance signal for Y/C processing.
U: Chrominance component signal for YUV mode.
V: Chrominance component signal for YUV mode.</td></tr>
<tr><td>YUV1</td><td rowspan="2">107</td><td>O</td><td>YUV pixel 1 output data.</td></tr>
<tr><td>VREF</td><td>I</td><td>Internal voltage reference to video DAC. Bypass to ground with 0.1-µF capacitor.</td></tr>
<tr><td>YUV2</td><td rowspan="2">108</td><td>O</td><td>YUV pixel 2 output data.</td></tr>
<tr><td>CDAC</td><td>O</td><td>Video DAC output. Refer to description and matrix for UDAC pin 106.</td></tr>
<tr><td>YUV3</td><td rowspan="2">109</td><td>O</td><td>YUV pixel 3 output data.</td></tr>
<tr><td>COMP</td><td>I</td><td>Compensation input. Bypass to ADVEE with 0.1-µF capacitor.</td></tr>
<tr><td>YUV4</td><td rowspan="2">110</td><td>O</td><td>YUV pixel 4 output data.</td></tr>
<tr><td>RSET</td><td>I</td><td>DAC current adjustment resistor input.</td></tr>
<tr><td>ADVEE</td><td>111</td><td>P</td><td>Analog power for video DAC.</td></tr>
</table>

ES6138F Pin Description (Continued)

Name	Pin Numbers	I/O	Definition
ADVSS	112	G	Analog ground for video DAC.
YUV5	113	O	YUV pixel 5 output data.
YDAC		O	Video DAC output. Refer to description and matrix for UDAC pin 106.
YUV6	114	O	YUV pixel 6 output data.
VDAC		O	Video DAC output. Refer to description and matrix for UDAC pin 106.
YUV7	115	O	YUV pixel 7 output data.
FDAC		O	Video DAC output. Refer to description and matrix for UDAC pin 106.
CAMIN3		I	Camera YUV 3.
PCLK2XSCN	116	I/O	27-MHz video output pixel clock.
CAMIN4		I	Camera YUV 4.
PCLKQSCN	117	O	13.5-MHz video output pixel clock.
CAMIN5		I	Camera YUV 5.
AUX3[2]		I/O	Aux3 data I/O.
VSYNC#	118	I/O	Vertical sync (active-low).
CAMIN6		I	Camera YUV 6.
AUX3[1]		I/O	Aux3 data I/O.
HSYNC#	119	I/O	Horizontal sync (active-low).
CAMIN7		I	Camera YUV 7.
AUX3[0]		I/O	Aux3 data I/O.
HD[5:0]	122:127	I/O	Host data bus lines 5:0.
DCI[5:0]		I/O	DVD channel data I/O.
AUX1[5:0]		I/O	Aux1 data I/O.
HD6	128	I/O	Host data bus line 6.
DCI6		I/O	DVD channel data I/O.
AUX1[6]		I/O	Aux1 data I/O.
VFD_DOUT		I	VFD data output.
HD7	131	I/O	Host data bus line 7.
DCI7		I/O	DVD channel data I/O.
AUX1[7]		I/O	Aux1 data I/O.
VFD_DIN		I	VFD data input.
HD8	132	I/O	Host data bus line 8.
DCI_FDS#		I/O	DVD input sector start (active-low).
AUX2[0]		I/O	Aux2 data I/O.
VFD_CLK		I	VFD clock input.

ES6138F Pin Description (Continued)

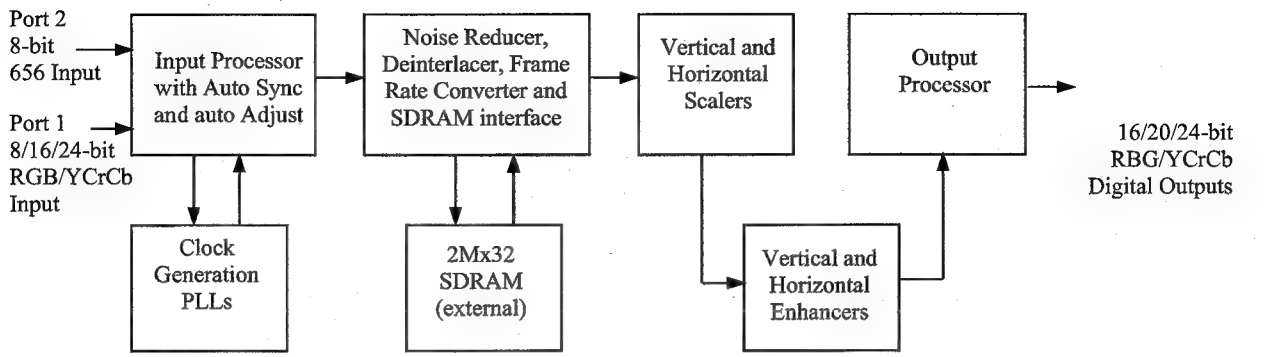
Name	Pin Numbers	I/O	Definition
HD9	133	I/O	Host data bus line 9.
AUX2[1]		I/O	Aux2 data I/O.
HD10	134	I/O	Host data bus line 10.
AUX2[2]		I/O	Aux2 data I/O.
HD11	135	I/O	Host data bus line 11.
AUX2[3]		I/O	Aux2 data I/O.
IRQ		O	IRQ.
HD12	136	I/O	Host data bus line 12.
AUX2[4]		I/O	Aux2 data I/O.
C2PO		I	C2PO error correction flag from CD-ROM.
HD13	137	I/O	Host data bus line 13.
AUX2[5]		I/O	Aux2 data I/O.
SP		I	16550 UART serial port input.
HD14	140	I/O	Host data bus line 14.
AUX2[6]		I/O	Aux2 data I/O.
HD15	141	I/O	Host data bus line 15.
AUX2[7]		I/O	Aux2 data I/O.
IR		I	IR remote control input.
HWRQ#	142	O	Host write request (active-low).
DCI_REQ#		O	DVD control interface request (active-low).
AUX4[1]		I/O	Aux4 data I/O.
HRRQ#	143	O	Host read request (active-low).
AUX4[0]		I/O	Aux4 data I/O.
HIRQ	144	I/O	Host interrupt.
DCI_ERR#		I/O	DVD channel data error (active-low).
AUX4[7]		I/O	Aux4 data I/O.
HRST#	145	O	Host reset (active-low).
AUX3[5]		I/O	Aux3 data I/O.
HIORDY	146	I	Host I/O ready.
AUX3[3]		I/O	Aux3 data I/O.
HWR#	149	I/O	Host write (active-low).
DCI_CLK		I/O	DVD channel data clock.
AUX4[5]		I/O	Aux4 data I/O.

ES6138F Pin Description (Continued)

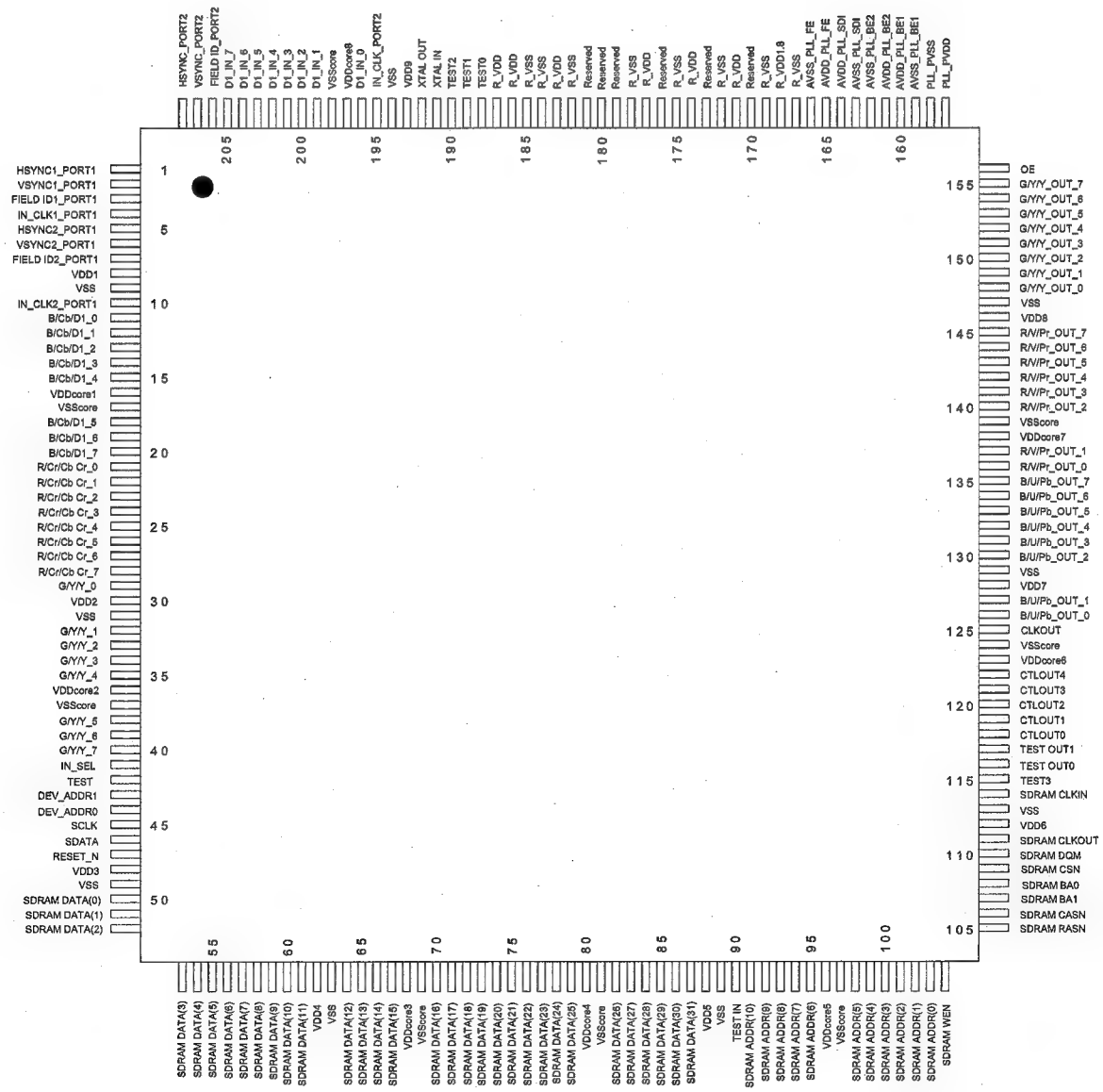
Name	Pin Numbers	I/O	Definition
HRD#	150	O	Host read (active-low).
DCI_ACK#		O	DVD channel data valid (active-low).
AUX4[6]		I/O	Aux4 data I/O.
HIOCS16#	151	I	Device 16-bit data transfer (active-low).
CAMCLK		I	Camera port pixel clock input.
AUX3[4]		I/O	Aux3 data I/O.
HCS1FX#	152	O	Host select 1 (active-low).
AUX3[7]		I/O	Aux3 data I/O.
HCS3FX#	153	O	Host select 3 (active-low).
AUX3[6]		I/O	Aux3 data I/O.
HA[2:0]	154, 155, 158	I/O	Host address bus.
AUX4[4:2]		I/O	Aux4 data I/Os.
AUX[0]	160	I/O	Auxiliary port 0 (open collector).
I2CDATA		I/O	I²C data I/O.
AUX[1]	161	I/O	Auxiliary port 1 (open collector).
I2C_CLK		I/O	I²C clock I/O.
AUX[2]	162	I/O	Auxiliary port.
IOW#		O	I/O write strobe (LCS1) (active-low).
AUX[3]	165	I/O	Auxiliary port.
IOR#		O	I/O read strobe (LCS1) (active-low).
AUX[6:4]	166:168	I/O	Auxiliary ports.
AUX[7]	169	I/O	Auxiliary port.
LOE#	170	O	RISC port output enable (active-low).
LCS[3:0]#	173:176	O	RISC port chip select (active-low).
LD[15:0]	178:182, 185:191,194:197	I/O	RISC port data bus.
LWRLL#	198	O	RISC port low-byte write enable (active-low).
LWRHL#	199	O	RISC port high-byte write enable (active-low).
CAMIN0	202	I	Camera YUV 0.
CAMIN1	203	I	Camera YUV 1.

FLI2310 (VI: IC734)

Block Diagrams



Pin Diagram



Pin details

Pin No	Pin Name	I/O Type	Voltage Tolerance	Drive	Pull up/ Pulldown	Description
1	HSYNC1_PORT1	Input	5v			Horizontal sync or reference -CTL1 of Port 1
2	VSYNC1_PORT1	Input	5v			Vertical sync or reference -CTL1 of Port 1
3	FIELD ID1_PORT1	Input	5v			Odd/Even Field identification -CTL1 of Port 1
4	IN_CLK1_PORT1	Input	5v			Data Clock input -CTL1 of Port 1
5	HSYNC2_PORT1	Input	5v			Horizontal sync or reference –CTL2 of Port 1
6	VSYNC2_PORT1	Input	5v			Vertical sync or reference –CTL2 of Port 1
7	FIELD ID2_PORT1	Input	5v			Odd/Even Field identification –CTL2 of Port 1
8	VDD1	Power				3.3 V - Power pin for IO
9	VSS	Ground				Ground
10	IN_CLK2_PORT1	Input	5v			Data Clock input –CTL2 of Port 1
11	B/Cb/D1_0	Input	5v			Port 1 – Digital video input (Blue/Cb/D1)
12	B/Cb/D1_1	Input	5v			Port 1 – Digital video input (Blue/Cb/D1)
13	B/Cb/D1_2	Input	5v			Port 1 – Digital video input (Blue/Cb/D1)
14	B/Cb/D1_3	Input	5v			Port 1 – Digital video input (Blue/Cb/D1)
15	B/Cb/D1_4	Input	5v			Port 1 – Digital video input (Blue/Cb/D1)
16	VDDcore1	Power				1.8 V - Power pin for core
17	VSScore	Ground				Ground
18	B/Cb/D1_5	Input	5v			Port 1 – Digital video input (Blue/Cb/D1)
19	B/Cb/D1_6	Input	5v			Port 1 – Digital video input (Blue/Cb/D1)
20	B/Cb/D1_7	Input	5v			Port 1 – Digital video input (Blue/Cb/D1)
21	R/Cr/Cb Cr_0	Input	5v			Port 1 – Digital video input (Red/Cr/CrCb)
22	R/Cr/Cb Cr_1	Input	5v			Port 1 – Digital video input (Red/Cr/CrCb)
23	R/Cr/Cb Cr_2	Input	5v			Port 1 – Digital video input (Red/Cr/CrCb)
24	R/Cr/Cb Cr_3	Input	5v			Port 1 – Digital video input (Red/Cr/CrCb)
25	R/Cr/Cb Cr_4	Input	5v			Port 1 – Digital video input (Red/Cr/CrCb)
26	R/Cr/Cb Cr_5	Input	5v			Port 1 – Digital video input (Red/Cr/CrCb)
27	R/Cr/Cb Cr_6	Input	5v			Port 1 – Digital video input (Red/Cr/CrCb)
28	R/Cr/Cb Cr_7	Input	5v			Port 1 – Digital video input (Red/Cr/CrCb)
29	G/Y/Y_0	Input	5v			Port 1 – Digital video input (Green/Y)
30	VDD2	Power				3.3 V - Power pin for IO
31	VSS	Ground				Ground
32	G/Y/Y_1	Input	5v			Port 1 – Digital video input (Green/Y)
33	G/Y/Y_2	Input	5v			Port 1 – Digital video input (Green/Y)
34	G/Y/Y_3	Input	5v			Port 1 – Digital video input (Green/Y)
35	G/Y/Y_4	Input	5v			Port 1 – Digital video input (Green/Y)
36	VDDcore2	Power				1.8 V - Power pin for core
37	VSScore	Ground				Ground
38	G/Y/Y_5	Input	5v			Port 1 – Digital video input (Green/Y)
39	G/Y/Y_6	Input	5v			Port 1 – Digital video input (Green/Y)
40	G/Y/Y_7	Input	5v			Port 1 – Digital video input (Green/Y)
41	IN_SEL	Output	5v	8 mA		Output to select external video mux
42	TEST	Input	5v			Connect to Ground
43	DEV_ADDR1	Input	5v			Device address setting 1
44	DEV_ADDR0	Input	5v			Device address setting 0

Pin No	Pin Name	I/O Type	Voltage Tolerance	Drive	Pull up/ Pulldown	Description
45	SCLK	I/O	5v	8 mA		2-wire serial control bus clock
46	SDATA	I/O	5v	8 mA		2-wire serial control bus data
47	RESET_N	Input	5v		PU	Reset
48	VDD3	Power				3.3 V – Power pin for IO
49	VSScore	Ground				Ground
50	SDRAM DATA(0)	Tristate I/O	5v	4 mA	PD	SDRAM data bus *
51	SDRAM DATA(1)	Tristate I/O	5v	4 mA	PD	SDRAM data bus *
52	SDRAM DATA(2)	Tristate I/O	5v	4 mA	PD	SDRAM data bus *
53	SDRAM DATA(3)	Tristate I/O	5v	4 mA	PD	SDRAM data bus *
54	SDRAM DATA(4)	Tristate I/O	5v	4 mA	PD	SDRAM data bus *
55	SDRAM DATA(5)	Tristate I/O	5v	4 mA	PD	SDRAM data bus *
56	SDRAM DATA(6)	Tristate I/O	5v	4 mA	PD	SDRAM data bus *
57	SDRAM DATA(7)	Tristate I/O	5v	4 mA	PD	SDRAM data bus *
58	SDRAM DATA(8)	Tristate I/O	5v	4 mA	PD	SDRAM data bus *
59	SDRAM DATA(9)	Tristate I/O	5v	4 mA	PD	SDRAM data bus *
60	SDRAM DATA(10)	Tristate I/O	5v	4 mA	PD	SDRAM data bus *
61	SDRAM DATA(11)	Tristate I/O	5v	4 mA	PD	SDRAM data bus *
62	VDD4	Power				3.3 V – Power pin for IO
63	VSS	Ground				Ground
64	SDRAM DATA(12)	Tristate I/O	5v	4 mA	PD	SDRAM data bus *
65	SDRAM DATA(13)	Tristate I/O	5v	4 mA	PD	SDRAM data bus *
66	SDRAM DATA(14)	Tristate I/O	5v	4 mA	PD	SDRAM data bus *
67	SDRAM DATA(15)	Tristate I/O	5v	4 mA	PD	SDRAM data bus *
68	VDDcore3	Power				1.8 V - Power pin for core
69	VSScore	Ground				Ground
70	SDRAM DATA(16)	Tristate I/O	5v	4 mA	PD	SDRAM data bus *
71	SDRAM DATA(17)	Tristate I/O	5v	4 mA	PD	SDRAM data bus *
72	SDRAM DATA(18)	Tristate I/O	5v	4 mA	PD	SDRAM data bus *
73	SDRAM DATA(19)	Tristate I/O	5v	4 mA	PD	SDRAM data bus *
74	SDRAM DATA(20)	Tristate I/O	5v	4 mA	PD	SDRAM data bus *
75	SDRAM DATA(21)	Tristate I/O	5v	4 mA	PD	SDRAM data bus *
76	SDRAM DATA(22)	Tristate I/O	5v	4 mA	PD	SDRAM data bus *
77	SDRAM DATA(23)	Tristate I/O	5v	4 mA	PD	SDRAM data bus *
78	SDRAM DATA(24)	Tristate I/O	5v	4 mA	PD	SDRAM data bus *
79	SDRAM DATA(25)	Tristate I/O	5v	4 mA	PD	SDRAM data bus *
80	VDDcore4	Power				1.8 V – Power pin for core
81	VSScore	Ground				Ground
82	SDRAM DATA(26)	Tristate I/O	5v	4 mA	PD	SDRAM data bus *
83	SDRAM DATA(27)	Tristate I/O	5v	4 mA	PD	SDRAM data bus *
84	SDRAM DATA(28)	Tristate I/O	5v	4 mA	PD	SDRAM data bus *
85	SDRAM DATA(29)	Tristate I/O	5v	4 mA	PD	SDRAM data bus *
86	SDRAM DATA(30)	Tristate I/O	5v	4 mA	PD	SDRAM data bus *
87	SDRAM DATA(31)	Tristate I/O	5v	4 mA	PD	SDRAM data bus *
88	VDD5	Power				3.3 V – Power pin for IO

Pin No	Pin Name	I/O Type	Voltage Tolerance	Drive	Pull up/ Pulldown	Description
89	VSS	Ground				Ground
90	TEST IN	Input	5V			Test input-Connect to ground
91	SDRAM ADDR(10)	Tristate O/P	5v	8 mA		SDRAM address bus *
92	SDRAM ADDR(9)	Tristate O/P	5v	8 mA		SDRAM address bus *
93	SDRAM ADDR(8)	Tristate O/P	5v	8 mA		SDRAM address bus *
94	SDRAM ADDR(7)	Tristate O/P	5v	8 mA		SDRAM address bus *
95	SDRAM ADDR(6)	Tristate O/P	5v	8 mA		SDRAM address bus *
96	VDDcore5	Power				1.8 V – Power pin for core
97	VSScore	Ground				Ground
98	SDRAM ADDR(5)	Tristate O/P	5v	8 mA		SDRAM address bus *
99	SDRAM ADDR(4)	Tristate O/P	5v	8 mA		SDRAM address bus *
100	SDRAM ADDR(3)	Tristate O/P	5v	8 mA		SDRAM address bus *
101	SDRAM ADDR(2)	Tristate O/P	5v	8 mA		SDRAM address bus *
102	SDRAM ADDR(1)	Tristate O/P	5v	8 mA		SDRAM address bus *
103	SDRAM ADDR(0)	Tristate O/P	5v	8 mA		SDRAM address bus *
104	SDRAM WEN	Tristate O/P	5v	8 mA		SDRAM write enable *
105	SDRAM RASN	Tristate O/P	5v	8 mA		SDRAM row address select *
106	SDRAM CASN	Tristate O/P	5v	8 mA		SDRAM column address select *
107	SDRAM BA1	Tristate O/P	5v	8 mA		SDRAM bank select 1*
108	SDRAM BA0	Tristate O/P	5v	8 mA		SDRAM bank select 0*
109	SDRAM CSN	Tristate O/P	5v	4 mA		SDRAM CS *
110	SDRAM DQM	Tristate O/P	5v	8 mA		SDRAM DQM *
111	SDRAM CLKOUT	Output	5v	12 mA		Clock out to SDRAM *
112	VDD6	Power				3.3 V - Power pin for IO
113	VSS	Ground				Ground
114	SDRAM CLKIN	Input	5v			Trace delayed SDRAM Clock in
115	TEST3	Input				Test input – Connect to ground
116	TEST OUT0	Output				Test output – leave open
117	TEST OUT1 / Interrupt Out	Output				Interrupt Output
118	CTLOUT0	Tristate O/P	5v	8 mA		Control signal output selectable as HSync1/ CSync/HRef/Monitor coast
119	CTLOUT1	Tristate O/P	5v	8 mA		Control signal output selectable as VSync1/CRef/VRef/Film Indicator
120	CTLOUT2	Tristate O/P	5v	8 mA		Control signal output selectable as Monitor coast/HRef/VDD_en / HSync2
121	CTLOUT3	Tristate O/P	5v	8 mA		Control signal output selectable as Film Indicator/VRef/backlight_en/VSync2
122	CTLOUT4	Tristate O/P	5v	8 mA		Control signal output selectable as CRef/Field ID/CSync/Monitor coast
123	VDDcore6	Power				1.8 V - Power pin for core
124	VSScore	Ground				Ground
125	CLKOUT	Tristate O/P	5v	12 mA		Output data rate clock
126	B/U/Pb_OUT_0	Tristate O/P	5v	8 mA		Digital video output – Blue/U/Pb
127	B/U/Pb_OUT_1	Tristate O/P	5v	8 mA		Digital video output – Blue/U/Pb

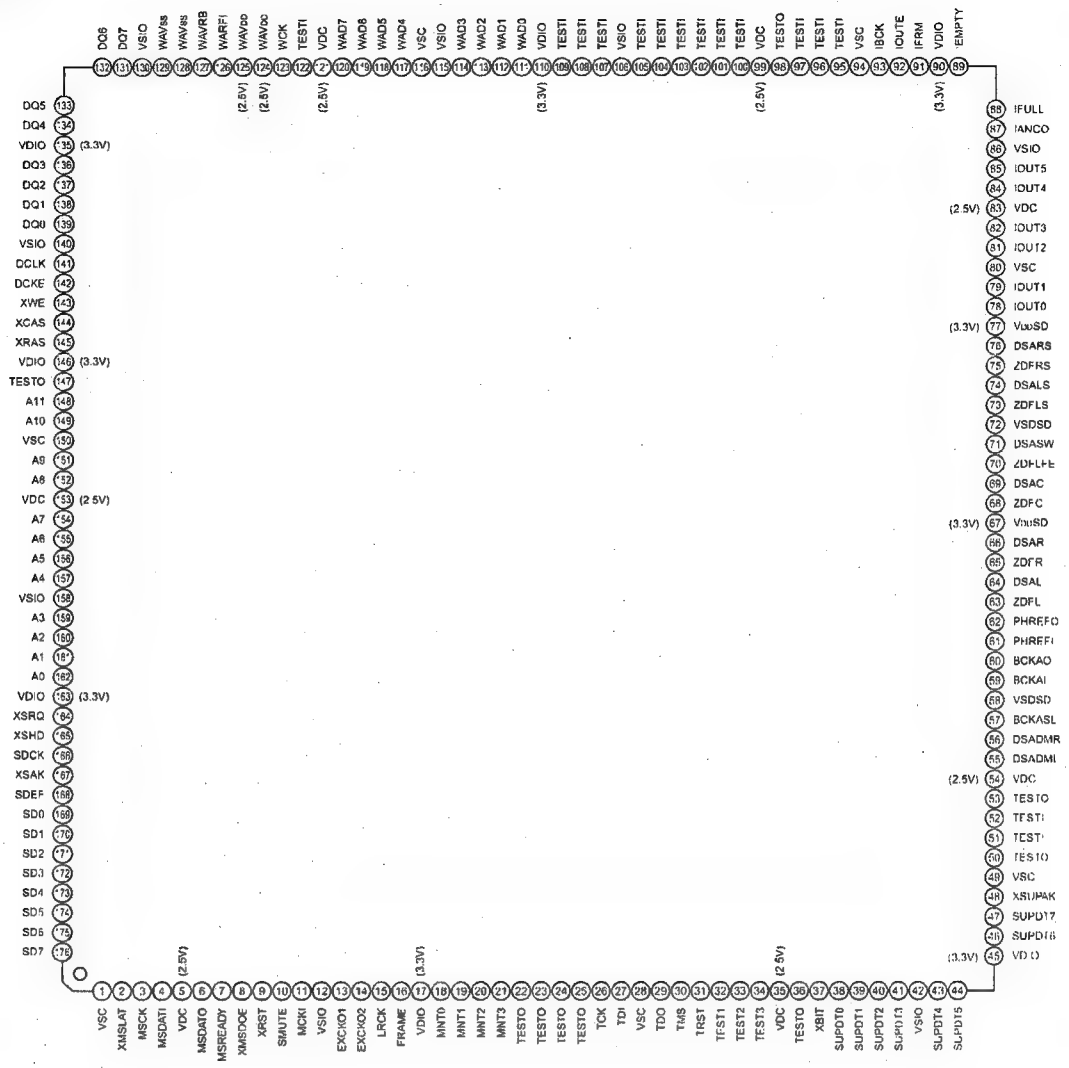
Pin No	Pin Name	I/O Type	Voltage Tolerance	Drive	Pull up/ Pulldown	Description
128	VDD7	Power				3.3 V – Power pin for IO
129	VSS	Ground				Ground
130	B/U/Pb_OUT_2	Tristate O/P	5v	8 mA		Digital video output – Blue/U/Pb
131	B/U/Pb_OUT_3	Tristate O/P	5v	8 mA		Digital video output – Blue/U/Pb
132	B/U/Pb_OUT_4	Tristate O/P	5v	8 mA		Digital video output – Blue/U/Pb
133	B/U/Pb_OUT_5	Tristate O/P	5v	8 mA		Digital video output – Blue/U/Pb
134	B/U/Pb_OUT_6	Tristate O/P	5v	8 mA		Digital video output – Blue/U/Pb
135	B/U/Pb_OUT_7	Tristate O/P	5v	8 mA		Digital video output – Blue/U/Pb
136	R/V/Pr_OUT_0	Tristate O/P	5v	8 mA		Digital video output – Red/V/Pr
137	R/V/Pr_OUT_1	Tristate O/P	5v	8 mA		Digital video output – Red/V/Pr
138	VDDcore7	Power				1.8 V – Power pin for core
139	VSScore	Ground				Ground
140	R/V/Pr_OUT_2	Tristate O/P	5v	8 mA		Digital video output – Red/V/Pr
141	R/V/Pr_OUT_3	Tristate O/P	5v	8 mA		Digital video output – Red/V/Pr
142	R/V/Pr_OUT_4	Tristate O/P	5v	8 mA		Digital video output – Red/V/Pr
143	R/V/Pr_OUT_5	Tristate O/P	5v	8 mA		Digital video output – Red/V/Pr
144	R/V/Pr_OUT_6	Tristate O/P	5v	8 mA		Digital video output – Red/V/Pr
145	R/V/Pr_OUT_7	Tristate O/P	5v	8 mA		Digital video output – Red/V/Pr
146	VDD8	Power				3.3 V – Power pin for IO
147	VSS	Ground				Ground
148	G/Y/Y_OUT_0	Tristate O/P	5v	8 mA		Digital video output – Green/Y
149	G/Y/Y_OUT_1	Tristate O/P	5v	8 mA		Digital video output – Green/Y
150	G/Y/Y_OUT_2	Tristate O/P	5v	8 mA		Digital video output – Green/Y
151	G/Y/Y_OUT_3	Tristate O/P	5v	8 mA		Digital video output – Green/Y
152	G/Y/Y_OUT_4	Tristate O/P	5v	8 mA		Digital video output – Green/Y
153	G/Y/Y_OUT_5	Tristate O/P	5v	8 mA		Digital video output – Green/Y
154	G/Y/Y_OUT_6	Tristate O/P	5v	8 mA		Digital video output – Green/Y
155	G/Y/Y_OUT_7	Tristate O/P	5v	8 mA		Digital video output – Green/Y
156	OE	Input	5v			Output data enable for Digital video output
157	PLL_PVDD	Power				1.8 V – Power pin for PLL pads
158	PLL_PVSS	Ground				Ground for PLL pads
159	AVSS_PLL_BE1	Ground				PLL Ground
160	AVDD_PLL_BE1	Power				1.8 V – Power pin for PLL
161	AVDD_PLL_BE2	Power				1.8 V – Power pin for PLL
162	AVSS_PLL_BE2	Ground				PLL Ground
163	AVSS_PLL_SDI	Ground				PLL Ground
164	AVDD_PLL_SDI	Power				1.8 V – Power pin for PLL
165	AVDD_PLL_FE	Power				1.8 V – Power pin for PLL
166	AVSS_PLL_FE	Ground				PLL Ground
167	DAC_PVSS	Ground				Ground for DAC pads
168	DAC_VDD	Power				1.8 V – Digital power pin for DAC
169	DAC_VSS	Ground				DAC digital Ground
170	DAC_BOUT	Output		34 mA		Analog B/U output
171	DAC_AVDDB	Power				3.3 V – Analog power pin for B channel

Pin No	Pin Name	I/O Type	Voltage Tolerance	Drive	Pull up/ Pulldown	Description
172	DAC_AVSSB	Ground				Analog Ground for B channel
173	DAC_GOUT	Output		34 mA		Analog G/Y output
174	DAC_AVDDG	Power				3.3 V – Analog power pin for G channel
175	DAC_AVSSG	Ground				Analog Ground for G channel
176	DAC_ROUT	Output		34 mA		Analog R/V output
177	DAC_AVDDR	Power				3.3 V – Analog power pin for R channel
178	DAC_AVSSR	Ground				Analog Ground for R channel
179	DAC_COMP	Output				Compensation for video DACs
180	DAC_RSET	Output				Current setting resistor for video DACs
181	DAC_VREFOUT	Output				1.28 V Internally generated voltage reference for video DACs
182	DAC_VREFIN	Input				External Voltage reference for video DACs
183	DAC_AVDD	Power				3.3 V – Analog power pin for DAC
184	DAC_AVSS	Ground				Analog Ground for DAC
185	DAC_GR_AVSS	Ground				Ground for DAC Guard ring
186	DAC_GR_AVDD	Power				3.3 V – Power pin for DAC Guard ring
187	DAC_PVDD	Power				3.3 V –Power pin for DAC pads
188	TEST0	Input	5v			Test pin – connect to ground
189	TEST1	Input	5v			Test pin – connect to ground
190	TEST2	Input	5v			Test pin – connect to ground
191	XTAL IN	Input				External parallel crystal oscillator
192	XTAL OUT	Output				External parallel crystal oscillator
193	VDD9	Power				3.3 V - Power pin for IO
194	VSS	Ground				Ground
195	IN_CLK_PORT 2	Input	5v	4 mA		Port 2 - Data Clock input
196	D1_IN_0	Input	5v	4 mA		Port 2 - ITU-R BT656 digital data input
197	VDDcore8	Power				1.8 V – Power pin for core
198	VSScore	Ground				Ground
199	D1_IN_1	Input	5v	4 mA		Port 2 - ITU-R BT656 digital data input
200	D1_IN_2	Input	5v	4 mA		Port 2 - ITU-R BT656 digital data input
201	D1_IN_3	Input	5v	4 mA		Port 2 - ITU-R BT656 digital data input
202	D1_IN_4	Input	5v	4 mA		Port 2 - ITU-R BT656 digital data input
203	D1_IN_5	Input	5v	4 mA		Port 2 - ITU-R BT656 digital data input
204	D1_IN_6	Input	5v	4 mA		Port 2 - ITU-R BT656 digital data input
205	D1_IN_7	Input	5v	4 mA		Port 2 - ITU-R BT656 digital data input
206	FIELD ID_PORT 2	Input	5v	4 mA		Port 2 - Odd/Even Field identification
207	VSYNC_PORT 2	Input	5v	4 mA		Port 2 - Vertical sync or reference
208	HSYNC_PORT 2	Input	5v	4 mA		Port 2 - Horizontal sync or reference

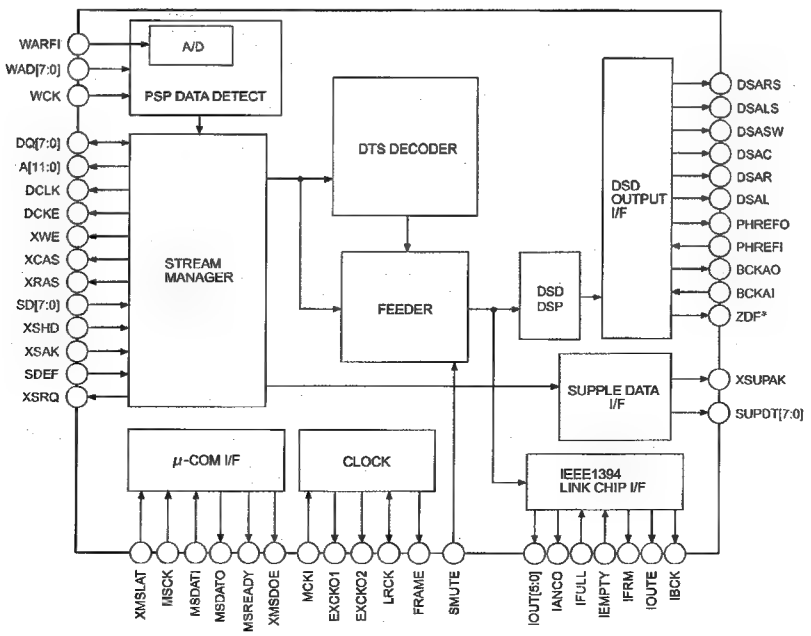
Note: * - The connection of these pins depends on the type of external SDRAM used.

CXD2753R (MA: IC405)

Pin Assignment



Block Diagram



	Pin Name	I/O	Functions
1	VSC	-	It fixed to ground.(for Core)
2	XMSLAT	I	Latch input for µCOM serial communication.
3	MSCK	I	Shift clock input for µCOM serial communication.
4	MSDATI	I	Data input for µCOM serial communication.
5	VDC	-	+2.5V Power for Core.
6	MSDATO	O	Data output for µCOM serial communication. "Hi-Z" potential except the output mode.
7	MSREADY	O	Completion flag of output preparation for µCOM serial communication. "L" is outputted at the time of completion.
8	XMSDOE	O	Output enable pin for µCOM serial communication. "L" is outputted at the time of MSDATO mode.
9	XRST	I	Reset pin. The whole IC is reset by at the time of "L" potential.
10	SMUTE	Ipd	Soft Mute. Soft mute of the audio output is carried out at the time of "H" potential. It releases at the time of "L" potential.
11	MCKI	I	Master Clock input.
12	VSIO	-	It fixed to Ground. Ground for I/O.
13	EXCKO1	O	External output Clock 1.
14	EXCKO2	O	External output Clock 2.
15	LRCK	O	44.1kHz, 1Fs Clock output.
16	FRAME	O	Frame signal output.
17	VDIO	-	+3.3V Power for I/O.
18	MNT0	O	Monitor output.
19	MNT1	O	Monitor output.
20	MNT2	O	Monitor output.
21	MNT3	O	Monitor output.
22	TESTO	O	Output terminal for a Test. (open)
23	TESTO	O	Output terminal for a Test.(open)
24	TESTO	O	Output terminal for a Test.(open)
25	TESTO	O	Output terminal for a Test.(open)
26	TCK	I	Clock input for a Test. It fixed to "L" potential.
27	TDI	Ipu	Input pin(pull-up) for a Test.(open)
28	VSC	-	It fixed to Ground. Ground for CORE.
29	TDO	O	Output for a Test.(open).
30	TMS	Ipu	Input pin(pull-up) for a Test.(open)
31	TRST	Ipu	Reset pin(pull-up) for a Test. Input the Power-on reset signal or fixed to "L" potential.
32	TEST1	I	Test input pin. It fixed to "L" potential.
33	TEST2	I	Test input pin. It fixed to "L" potential.
34	TEST3	I	Test input pin. It fixed to "L" potential.
35	VDC	-	+2.5V Power for CORE.
36	TESTO	O	Out put for TEST. It fixed to open.
37	XBIT	O	DST monitor.
38	SUPDT0	O	Supplementary data output. (LSB)
39	SUPDT1	O	Supplementary data output.
40	SUPDT2	O	Supplementary data output.
41	SUPDT3	O	Supplementary data output.
42	VSIO	-	Ground for I/O.
43	SUPDT4	O	Supplementary data output.
44	SUPDT5	O	Supplementary data output.
45	VDIO	-	+3.3V Power for I/O.
46	SUPDT6	O	Supplementary data output.
47	SUPDT7	O	Supplementary data output. (MSB)
48	XSUPAK	O	Supplementary data Acknowledge output terminal.
49	VSC	-	Ground for CORE.

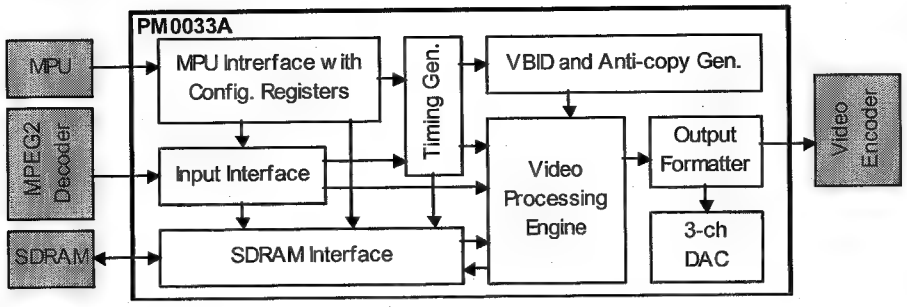
	Pin Name	I/O	Functions
50	TESTO	O	Output for TEST. (open)
51	TESTI	I	Input for TEST. It fixed to "L" potential.
52	TESTI	I	Input for TEST. It fixed to "L" potential.
53	TESTO	O	Output for TEST. (open)
54	VDC	-	+2.5V Power for CORE.
55	DSADML	O	DSD Data output terminal for Lch Down Mix.
56	DSADMR	O	DSD Data output terminal for Rch Down Mix.
57	BCKASL	I	I/O selection terminal of the Bit clock for DSD data output. L=input (Slave), H=output (Master)
58	VSDSD	-	Ground terminal for DSD data output.
59	BCKAI	I	Bit clock input terminal for DSD data output. Input a Bit clock into this terminal at the time of BCKASL="L" potential.
60	BCKAO	O	Bit clock output terminal for DSD data output. Bit clock output from this terminal at the time of BCKASL="H" potential.
61	PHREFI	I	Reference phase signal input terminal for DSD output phase modulation.
62	PHREFO	O	Reference phase signal output terminal for DSD output phase modulation.
63	ZDFL	O	Lch zero-data detection flag (at the time of µcom setup). It will be set to "H" if non-sound data continues 300 msecs.
64	DSAL	O	DSD data output terminal for Lch speaker.
65	ZDFR	O	Rch zero-data detection flag (at the time of µcom setup). It will be set to "H" if non-sound data continues 300 msecs.
66	DSAR	O	DSD data output terminal for Rch speaker.
67	VDDSD	-	+3.3V Power for DSD data output.
68	ZDFC	O	Cch zero-data detection flag (at the time of µcom setup). It will be set to "H" if non-sound data continues 300 msecs.
69	DSAC	O	DSD data output terminal for Cch speaker.
70	ZDFLFE	O	LFEch zero-data detection flag (at the time of µcom setup). It will be set to "H" if non-sound data continues 300 msecs.
71	DSASW	O	DSD data output terminal for SWch speaker.
72	VSDSD	-	Ground for DSD data output.
73	ZDFLS	O	LSch zero-data detection flag (at the time of µcom setup). It will be set to "H" if non-sound data continues 300 msecs.
74	DSALS	O	DSD data output terminal for LSch speaker.
75	ZDFRS	O	RSch zero-data detection flag (at the time of µcom setup). It will be set to "H" if non-sound data continues 300 msecs.
76	DSARS	O	DSD data output terminal for RSch speaker.
77	VDDSD	O	+3.3V Power for DSD data output.
78	IOUT0	O	Data output terminal 0 for IEEE1394 link chip I/F.
79	IOUT1	O	Data output terminal 1 for IEEE1394 link chip I/F.
80	VSC	-	Ground for CORE.
81	IOUT2	O	Data output terminal 2 for IEEE1394 link chip I/F.
82	IOUT3	O	Data output terminal 3 for IEEE1394 link chip I/F.
83	VDC	-	+2.5V Power for CORE.
84	IOUT4	O	Data output terminal 4 for IEEE1394 link chip I/F.
85	IOUT5	O	Data output terminal 5 for IEEE1394 link chip I/F.
86	VSIO	-	Ground for I/O.
87	IANCO	O	Transmission information data output terminal for IEEE1394 link chip I/F.
88	IFULL	I	Data transmission hold request signal input terminal for IEEE1394 link chip I/F.
89	IEMPTY	I	High speed transmission request signal input terminal for IEEE1394 link chip I/F.
90	VDIO	-	+3.3V Power for I/O.
91	IFRM	O	Frame reference signal output terminal for IEEE1394 link chip I/F.
92	IOUTE	O	Enable signal output terminal for IEEE1394 link chip I/F.
93	IBCK	O	Data transmission clock output terminal for IEEE1394 link chip I/F.
94	VSC	-	Ground for CORE.
95	TESTI	I	TEST input terminal. It fixed to "H" potential.

	Pin Name	I/O	Functions
96	TESTI	I	TEST input terminal. It fixed to "L" potential.
97	TESTI	Ipu	TEST input terminal. It fixed to "H" potential.
98	TESTO	O	TEST output terminal. (open)
99	VDC	-	+2.5V Power for CORE.
100	TESTI	I	TEST input terminal. It fixed to "L" potential.
101	TESTI	I	TEST input terminal. It fixed to "L" potential.
102	TESTI	I	TEST input terminal. It fixed to "L" potential.
103	TESTI	I	TEST input terminal. It fixed to "L" potential.
104	TESTI	I	TEST input terminal. It fixed to "L" potential.
105	TESTI	I	TEST input terminal. It fixed to "L" potential.
106	VSIO	-	Ground for I/O.
107	TESTI	I	TEST input terminal. It fixed to "L" potential.
108	TESTI	I	TEST input terminal. It fixed to "L" potential.
109	TESTI	I	TEST input terminal. It fixed to "L" potential.
110	VDIO	-	+3.3V Power for I/O.
111	WAD0	I	External A/D data input terminal(LSB) for PSP physical disc mark detection.
112	WAD1	I	External A/D data input terminal for PSP physical disc mark detection.
113	WAD2	I	External A/D data input terminal for PSP physical disc mark detection.
114	WAD3	I	External A/D data input terminal for PSP physical disc mark detection.
115	VSIO	-	Ground for I/O.
116	VSC	-	Ground for CORE.
117	WAD4	I	External A/D data input terminal for PSP physical disc mark detection.
118	WAD5	I	External A/D data input terminal for PSP physical disc mark detection.
119	WAD6	I	External A/D data input terminal for PSP physical disc mark detection.
120	WAD7	I	External A/D data input terminal(MSB) for PSP physical disc mark detection.
121	VDC	-	+2.5V Powe for CORE.
122	TESTI	I	TEST input terminal. It fixed to "L" potential.
123	WCK	I	Operation clock for PSP physical disc mark detection.
124	WAVDD	-	+2.5V Power. A/D Power supply for PSP physical disc mark detection.
125	WAVDD	-	+2.5V Power. A/D Power supply for PSP physical disc mark detection.
126	WARFI	Ai	Analog RF signal input terminal for PSP physical disc mark detection.
127	WAVRB	Ai	A/D bottom reference terminal for PSP physical disc mark detection.
128	WAVss	-	A/D Ground terminal for PSP physical disc mark detection.
129	WAVss	-	A/D Ground terminal for PSP physical disc mark detection.
130	VSIO	-	Ground for I/O.
131	DQ7	I/O	SDRAM data input/output terminal. (MSB)
132	DQ6	I/O	SDRAM data input/output terminal.
133	DQ5	I/O	SDRAM data input/output terminal.
134	DQ4	I/O	SDRAM data input/output terminal.
135	VDIO	-	+3.3V Power for I/O.
136	DQ3	I/O	SDRAM data input/output terminal.
137	DQ2	I/O	SDRAM data input/output terminal.
138	DQ1	I/O	SDRAM data input/output terminal.
139	DQ0	I/O	SDRAM data input/output terminal. (LSB)
140	VSIO	-	Ground for I/O.
141	DCLK	O	Clock output terminal for SDRAM.
142	DCKE	O	Clock enable output terminal for SDRAM.
143	XWE	O	Write enable output terminal for SDRAM.
144	XCAS	O	Colomn address strobe output terminal for SDRAM.
145	XRAS	O	Row address strobe output terminal for SDRAM.
146	VDIO	-	+3.3V Power for I/O.
147	TESTO	O	Output terminal for TEST. (open)

	Pin Name	I/O	Functions
148	A11	O	Address output terminal for SDRAM. (MSB)
149	A10	O	Address output terminal for SDRAM.
150	VSC	-	Ground for CORE.
151	A9	O	Address output terminal for SDRAM.
152	A8	O	Address output terminal for SDRAM.
153	VDC	-	+2.5V Power for CORE.
154	A7	O	Address output terminal for SDRAM.
155	A6	O	Address output terminal for SDRAM.
156	A5	O	Address output terminal for SDRAM.
157	A4	O	Address output terminal for SDRAM.
158	VSIO	-	Ground for I/O.
159	A3	O	Address output terminal for SDRAM.
160	A2	O	Address output terminal for SDRAM.
161	A1	O	Address output terminal for SDRAM.
162	A0	O	Address output terminal for SDRAM. (LSB)
163	VDIO	-	+3.3V Power for I/O.
164	XSRQ	O	Output terminal of the Data Request signal inputted a front-end processor.
165	XSHD	I	Input terminal of the header Flag outputted from a front-end processor.
166	SDCK	I	Input terminal of the data conveyance Clock outputted from a front-end processor.
167	XASK	I	Input terminal of the data valid Flag outputted from a front-end processor.
168	SDEF	I	Input terminal of the error Flag outputted from a front-end processor.
169	SD0	I	Input terminal of the stream Data outputted from a front-end processor.
170	SD1	I	Input terminal of the stream Data outputted from a front-end processor.
171	SD2	I	Input terminal of the stream Data outputted from a front-end processor.
172	SD3	I	Input terminal of the stream Data outputted from a front-end processor.
173	SD4	I	Input terminal of the stream Data outputted from a front-end processor.
174	SD5	I	Input terminal of the stream Data outputted from a front-end processor.
175	SD6	I	Input terminal of the stream Data outputted from a front-end processor.
176	SD7	I	Input terminal of the stream Data outputted from a front-end processor.

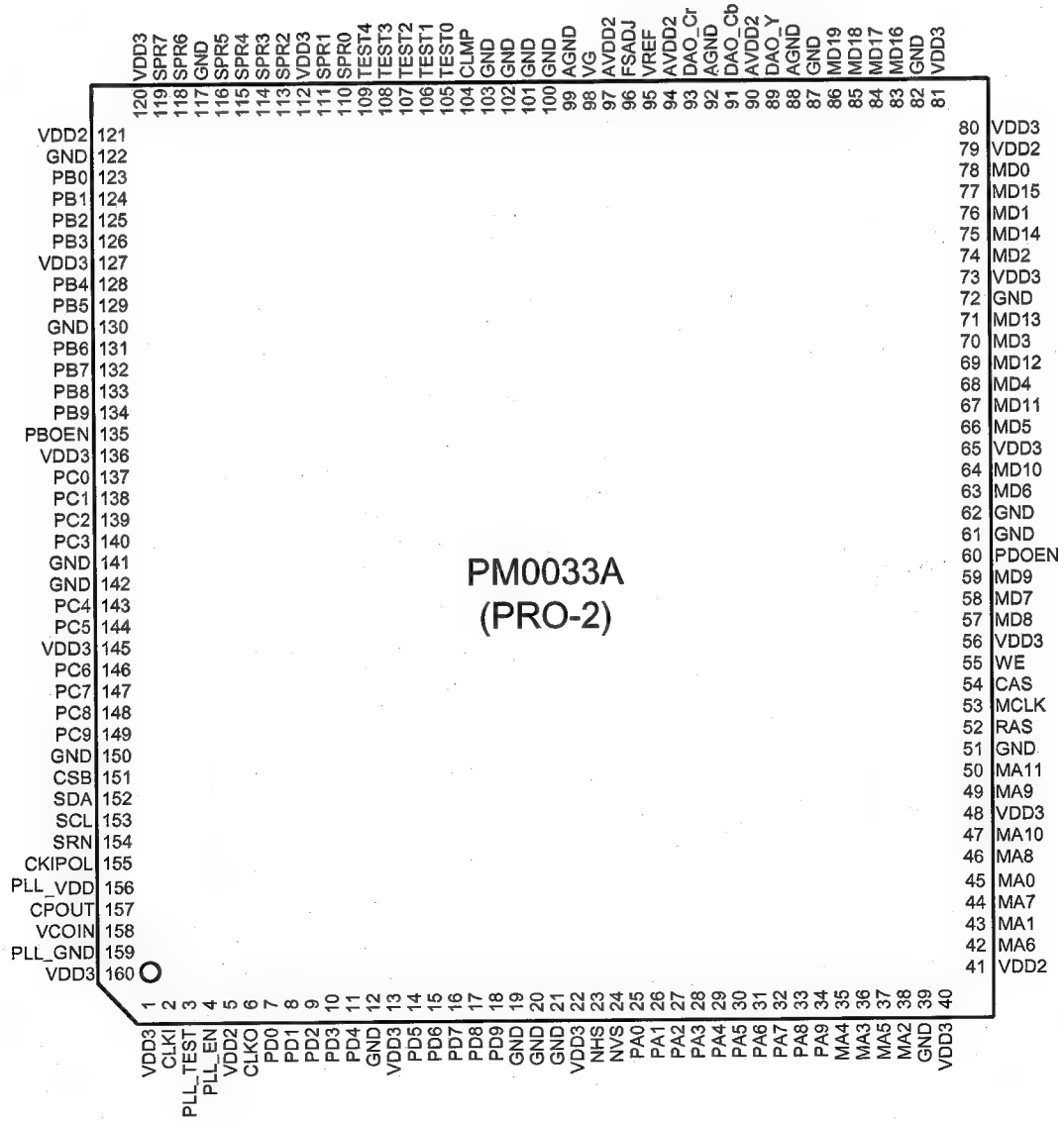
Ipu: Pull-up input Ipd: Pull-down input Ai: Analog input

PM0033A (MA: IC504)



System Block Diagram

Pin Assignment



PIN DESCRIPTION

Pin No.	PIN Name	I/O/P	Attribute	Functional Description
1	VDD3	P	-	Positive supply voltage (+3.3V) for Pad Ring
2	CLKI	In	LVTTL	System clock input (27MHz)
3	PLL_TEST	In	LVTTL	Test purpose only (must be connected to ground)
4	PLL_EN	In	LVTTL	PLL VCO enable
5	VDD2	P	-	Digital positive supply voltage (+2.5V) for core
6	CLKO	Out	2mA	Clock output (27MHz)
7	PD0	Inout	LVTTL, leakage, 2mA	Pixel input/output port D (LSB)
8	PD1	Inout	LVTTL, leakage, 2mA	Pixel input/output port D
9	PD2	Inout	LVTTL, leakage, 2mA	Pixel input/output port D
10	PD3	Inout	LVTTL, leakage, 2mA	Pixel input/output port D
11	PD4	Inout	LVTTL, leakage, 2mA	Pixel input/output port D
12	GND	P	-	Digital ground for Pad Ring
13	VDD3	P	-	Positive supply voltage (+3.3V) for Pad Ring
14	PD5	Inout	LVTTL, leakage, 2mA	Pixel input/output port D
15	PD6	Inout	LVTTL, leakage, 2mA	Pixel input/output port D
16	PD7	Inout	LVTTL, leakage, 2mA	Pixel input/output port D
17	PD8	Inout	LVTTL, leakage, 2mA	Pixel input/output port D
18	PD9	Inout	LVTTL, leakage, 2mA	Pixel input/output port D (MSB)
19	GND	P	-	Digital ground for Pad Ring
20	GND	P	-	Digital ground for Pad Ring
21	GND	P	-	Digital ground for core
22	VDD3	P	-	Positive supply voltage (+3.3V) for Pad Ring
23	NHS	In	Schmitt	Active low horizontal sync
24	NVS	In	Schmitt	Active low vertical sync
25	PA0	In	LVTTL	Pixel input port A (LSB)
26	PA1	In	LVTTL	Pixel input port A
27	PA2	In	LVTTL	Pixel input port A
28	PA3	In	LVTTL	Pixel input port A
29	PA4	In	LVTTL	Pixel input port A
30	PA5	In	LVTTL	Pixel input port A
31	PA6	In	LVTTL	Pixel input port A
32	PA7	In	LVTTL	Pixel input port A
33	PA8	In	LVTTL	Pixel input port A
34	PA9	In	LVTTL	Pixel input port A (MSB)
35	MA4	Out	2mA	Address output port for SDRAM
36	MA3	Out	2mA	Address output port for SDRAM
37	MA5	Out	2mA	Address output port for SDRAM
38	MA2	Out	2mA	Address output port for SDRAM
39	GND	P	-	Disital ground for Pad Ring
40	VDD3	P	-	Positive supply voltage (+3.3V) for Pad Ring

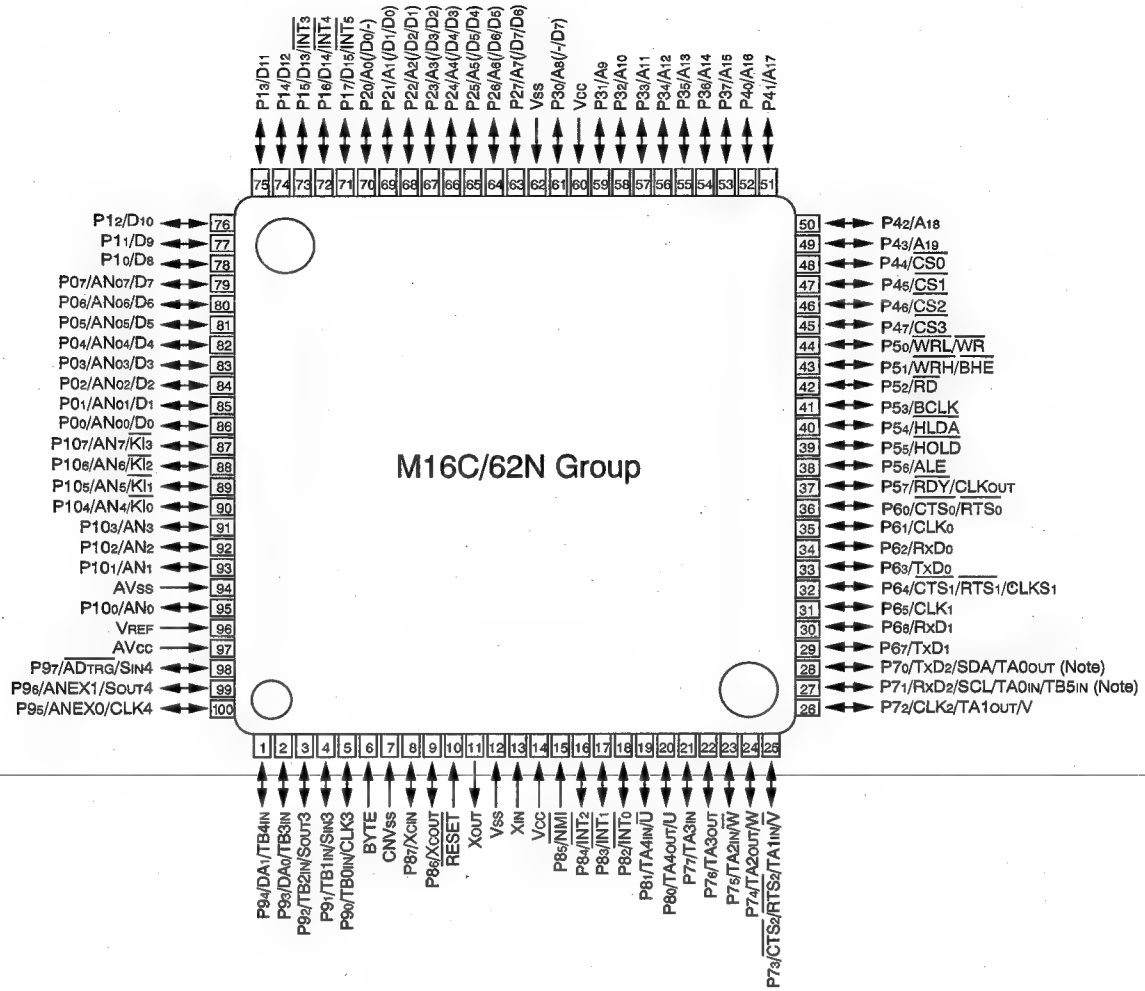
Pin No.	PIN Name	I/O/P	Attribute	Functional Description
41	VDD2	P	-	Digital positive supply voltage (+2.5V) for core
42	MA6	Out	2mA	Address output port for SDRAM
43	MA1	Out	2mA	Address output port for SDRAM
44	MA7	Out	2mA	Address output port for SDRAM
45	MA0	Out	2mA	Address output port for SDRAM (LSB)
46	MA8	Out	2mA	Address output port for SDRAM
47	MA10	Out	2mA	Address output port for SDRAM
48	VDD3	P	-	Positive supply voltage (+3.3V) for Pad Ring
49	MA9	Out	2mA	Address output port for SDRAM
50	MA11	Out	2mA	Address output port for SDRAM (MSB)
51	GND	P	-	Digital ground for Pad Ring
52	RAS	Out	2mA	Row Address Strobe command output port for SDRAM
53	MCLK	Out	4mA	Clock output port for SDRAM (54MHz)
54	CAS	Out	2mA	Column Address Strobe command output port for SDRAM
55	WE	Out	2mA	Write Enable output port for SDRAM
56	VDD3	P	-	Positive supply voltage (+3.3V) for Pad Ring
57	MD8	Inout	LVTTL, 2mA, Pullup	Data input/output port for SDRAM
58	MD7	Inout	LVTTL, 2mA, Pullup	Data input/output port for SDRAM
59	MD9	Inout	LVTTL, 2mA, Pullup	Data input/output port for SDRAM
60	PDOEN	In	LVTTL	Input/Output control pin for pixel port D (L: Input, H: Output)
61	GND	P	-	Digital ground for Pad Ring
62	GND	P	-	Digital ground for core
63	MD6	Inout	LVTTL, 2mA, Pullup	Data input/output port for SDRAM
64	MD10	Inout	LVTTL, 2mA, Pullup	Data input/output port for SDRAM
65	VDD3	P	-	Positive supply voltage (+3.3V) for Pad Ring
66	MD5	Inout	LVTTL, 2mA, Pullup	Data input/output port for SDRAM
67	MD11	Inout	LVTTL, 2mA, Pullup	Data input/output port for SDRAM
68	MD4	Inout	LVTTL, 2mA, Pullup	Data input/output port for SDRAM
69	MD12	Inout	LVTTL, 2mA, Pullup	Data input/output port for SDRAM
70	MD3	Inout	LVTTL, 2mA, Pullup	Data input/output port for SDRAM
71	MD13	Inout	LVTTL, 2mA, Pullup	Data input/output port for SDRAM
72	GND	P	-	Digital ground for Pad Ring
73	VDD3	P	-	Positive supply voltage (+3.3V) for Pad Ring
74	MD2	Inout	LVTTL, 2mA, Pullup	Data input/output port for SDRAM
75	MD14	Inout	LVTTL, 2mA, Pullup	Data input/output port for SDRAM
76	MD1	Inout	LVTTL, 2mA, Pullup	Data input/output port for SDRAM
77	MD15	Inout	LVTTL, 2mA, Pullup	Data input/output port for SDRAM
78	MD0	Inout	LVTTL, 2mA, Pullup	Data input/output port for SDRAM (LSB)
79	VDD2	P	-	Digital positive supply voltage (+2.5V) for core
80	VDD3	P	-	Positive supply voltage (+3.3V) for Pad Ring
81	VDD3	P	-	Positive supply voltage (+3.3V) for Pad Ring
82	GND	P	-	Digital ground for Pad Ring
83	MD16	Inout	LVTTL, 2mA, Pullup	Data input/output port for SDRAM

Pin No.	PIN Name	I/O/P	Attribute	Functional Description
84	MD17	Inout	LVTTL, 2mA, Pullup	Data input/output port for SDRAM
85	MD18	Inout	LVTTL, 2mA, Pullup	Data input/output port for SDRAM
86	MD19	Inout	LVTTL, 2mA, Pullup	Data input/output port for SDRAM (MSB)
87	GND	P	-	Digital ground for core
88	AGND	P	-	Analog ground for DA Converter
89	DAO_Y	Out	-	Y analog video output
90	AVDD2	P	-	Positive supply voltage (+2.5V) for DA Converter
91	DAO_Cb	Out	-	Cb analog video output
92	AGND	P	-	Analog ground for DA Converter
93	DAO_Cr	Out	-	Cr analog video output
94	AVDD2	P	-	Positive supply voltage (+2.5V) for DA Converter
95	VREF	In	-	Reference voltage input for DAC
96	FSADJ	Inout	-	Current source for full scale adjustment of DAC (must be connected to analog ground over resister)
97	AVDD2	P	-	Positive supply voltage (+2.5V) for DA Converter
98	VG	Out	-	Compensation pin for gate voltage of DAC current cells (must be connected to ACDD2 over capacitor)
99	AGND	P	-	Analog ground for DA Converter
100	GND	P	-	Digital ground for core
101	GND	P	-	Digital ground for Pad Ring
102	GND	P	-	Digital ground for Pad Ring
103	GND	P	-	Digital ground for core
104	CLMP	Out	2mA	Clamp pulse output
105	TEST0	In	LVTTL	Test purpose only(must be connected to ground)
106	TEST1	In	LVTTL	Test purpose only(must be connected to ground)
107	TEST2	In	LVTTL	Test purpose only(must be connected to ground)
108	TEST3	In	LVTTL	Test purpose only(must be connected to ground)
109	TEST4	In	LVTTL	Test purpose only(must be connected to ground)
110	SPR0	Out	2mA	Multi-purpose parallel output converted from serial data through MPU interface(LSB)
111	SPR1	Out	2mA	Multi-purpose parallel output converted from serial data through MPU interface
112	VDD3	P	-	Positive supply voltage (+3.3V) for Pad Ring
113	SPR2	Out	2mA	Multi-purpose parallel output converted from serial data through MPU interface
114	SPR3	Out	2mA	Multi-purpose parallel output converted from serial data through MPU interface
115	SPR4	Out	2mA	Multi-purpose parallel output converted from serial data through MPU interface
116	SPR5	Out	2mA	Multi-purpose parallel output converted from serial data through MPU interface
117	GND	P	-	Digital ground for Pad Ring
118	SPR6	Out	2mA	Multi-purpose parallel output converted from serial data through MPU interface

Pin No.	PIN Name	I/O/P	Attribute	Functional Description
119	SPR7	Out	2mA	Multi-purpose parallel output converted from serial data through MPU interface(MSB)
120	VDD3	P	-	Positive supply voltage (+3.3V) for Pad Ring
121	VDD2	P	-	Disital positive supply voltage (+2.5V) for core
122	GND	P	-	Digital ground for Pad Ring
123	PB0	Inout	LVTTL, leakage, 2mA	Pixel input/output port B (LSB)
124	PB1	Inout	LVTTL, leakage, 2mA	Pixel input/output port B
125	PB2	Inout	LVTTL, leakage, 2mA	Pixel input/output port B
126	PB3	Inout	LVTTL, leakage, 2mA	Pixel input/output port B
127	VDD3	P	-	Positive supply voltage (+3.3V) for Pad Ring
128	PB4	Inout	LVTTL, leakage, 2mA	Pixel input/output port B
129	PB5	Inout	LVTTL, leakage, 2mA	Pixel input/output port B
130	GND	P	-	Digital ground for Pad Ring
131	PB6	Inout	LVTTL, leakage, 2mA	Pixel input/output port B
132	PB7	Inout	LVTTL, leakage, 2mA	Pixel input/output port B
133	PB8	Inout	LVTTL, leakage, 2mA	Pixel input/output port B
134	PB9	Inout	LVTTL, leakage, 2mA	Pixel input/output port B (MSB)
135	PBOEN	In	LVTTL	Input/Output control pin for pixel port B (L: Input, H: Output)
136	VDD3	P	-	Positive supply voltage (+3.3V) for Pad Ring
137	PC0	Out	2mA	Pixel input/output port C (LSB)
138	PC1	Out	2mA	Pixel input/output port C
139	PC2	Out	2mA	Pixel input/output port C
140	PC3	Out	2mA	Pixel input/output port C
141	GND	P	-	Digital ground for Pad Ring
142	GND	P	-	Digital ground for core
143	PC4	Out	2mA	Pixel input/output port C
144	PC5	Out	2mA	Pixel input/output port C
145	VDD3	P	-	Positive supply voltage (+3.3V) for Pad Ring
146	PC6	Out	2mA	Pixel input/output port C
147	PC7	Out	2mA	Pixel input/output port C
148	PC8	Out	2mA	Pixel input/output port C
149	PC9	Out	2mA	Pixel input/output port C (MSB)
150	GND	P	-	Digital ground for Pad Ring
151	CSB	In	Schmitt	Chip select input of MPU serial interface
152	SDA	In	Schmitt	Data input of MPU serial interface
153	SCL	In	Schmitt	Clock input of MPU serial interface
154	SRN	In	Schmitt	System reset input (negative)
155	CKIPOL	In	LVTTL	Internal clock polarity control input
156	PLL_VDD	P	-	Disital positive supply voltage (+2.5V) for PLL
157	CPOUT	Out	Analog	PLL charge pump output (must be connected to PLL external loop filter)
158	VCOIN	In	Analog	Input pin connected to PLL external loop filter
159	PLL_GND	P	-	Ground for PLL
160	VDD3	P	-	Positive supply voltage (+3.3V) for Pad Ring

M30620FCNGP (AD: IC402)

PIN CONFIGURATION (top view)



Note: P70 and P71 are N channel open-drain output pin.

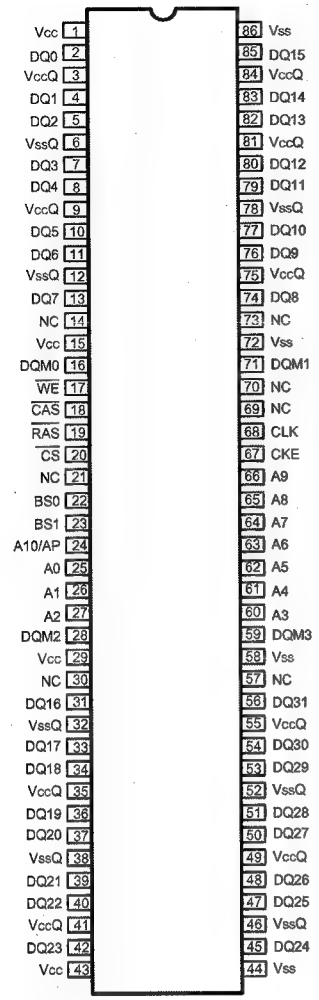
PIN Description

PIN No	FUNCTION			DESCRIPTION
	PIN NAME	SYMBOL	I/O	
1	TB4IN	+3.3V_ON/OFF	O	+3.3V' POWER ON/OFF CONTROL SIGNAL FOR DSP / H=ON , L=OFF
2	P93	V-CS	O	VFD CONTROL SIGNAL(CS) / H=NEGATE , L=ASSERT
3	SOUT3	V-DATA	O	VFD CONTROL SIGNAL(DATA)
4	SIN3	DVI	O	LED ON/OFF CONTROL SIGNAL FOR DVI / H=LED ON, L=LED OFF
5	CLK3	V-CLK	O	VFD CONTROL SIGNAL(CLK)
6	BYTE	BUS WIDTH SEL	I	EXT DATA BUS WIDTH SELECT
7	CNVss	CNVss	I	MODE SELECT SIGNAL / H=SINGLE CHIP MODE , L=MICRO PROSECER MODE
8	P87	NCS_1394	O	1394 CONTROL SIGNAL(CS) / H=NEGATE , L=ASSERT
9	P86	48_96	O	AUDIO STATUS SELECT SIGNAL1
10	RESET-	RESET	I	RESET INPUT/ H=NEGATE , L=ASSERT *RESET IC OUT = OPEN DRAIN
11	XOUT	CLOCK OUT	O	X'TAL CONNECTION
12	VSS	GND	I	GND
13	XIN	CLOCK IN	I	X'TAL CONNECTION
14	VCC	VCC	I	VCC
15	NMI	-	I	NON-MASKABLE INTERRUPT SIGNAL
16	INT2-	OP_CS	I	BE CONTROL SIGNAL(CS) / H=NEGATE , L=ASSERT
17	INT1-	W.REM	I	WIRED REMOTE INPUT
18	INT0-	REMO	I	REMOTE INPUT
19	P81	-	O	NOT USED
20	TA4OUT	OPN_DRV	O	TRAY CONTROL SIGNAL1
21	P77	-	O	NOT USED
22	TA3OUT	CLS_DRV	O	TRAY CONTROL SIGNAL2
23	TA2IN	DFRESET	I	INTERRUPT INPUT FOR BE / H=NEGATE , L=ASSERT
24	P74	+1.8V_ON/OFF	O	+1.8V POWER CONTROL SIGNAL FOR DSP / H=ON , L=OFF
25	RTS2-	PANEL_REQ	O	BE CONTROL SIGNAL(REQ) / H=ASSERT , L=NEGATE
26	CLK2	OP_CLK	I	BE CONTROL SIGNAL(CLK)
27	RXD2	OP_DI	I	BE CONTROL SIGNAL(DI)
28	TXD2	OP_DO	O	BE CONTROL SIGNAL(DO)
29	TXD1	TXD232	O	TXD
30	RXD1	RXD232	I	RXD
31	CLK1	CLK1	I	CLOCK MODE SELECT
32	RTS1	1394_RST	O	RESET OUTPUT FOR 1394 / H=NEGATE , L=ASSERT
33	TXD0	TXD1394	O	1394 CONTROL SIGNAL(DO)
34	RXD0	RXD1394	I	1394 CONTROL SIGNAL(DI)
35	CLK0	CLK1394	O	1394 CONTROL SIGNAL(CLK)
36	P60	SEL_1394	O	AUDIO STATUS SELECT SIGNAL2
37	P57	EXTMIXIN	O	AUDIO STATUS SELECT SIGNAL3
38	P56	192_OTHER	O	AUDIO STATUS SELECT SIGNAL4
39	FRASH_EPM	FRASH_EPM	I	INTERNAL FLASH CONTROL SIGNAL1 / H=NOMAL , L=BOOT
40	P54	D.L.ON	O	AUDIO STATUS SELECT SIGNAL5
41	P53	DSD_SEL	O	AUDIO STATUS SELECT SIGNAL6
42	P52	FILM_ON	I	VIDEO STATUS SELECT SIGNAL
43	P51	EMUTE	O	MUTE CONTROL SIGNAL / H=MUTE ON , L=MUTE OFF
44	FRASH_HCE	FRASH_HCE	I	INTERNAL FLASH CONTROL SIGNAL1 / H=BOOT , L=NOMAL
45	P47	DIR_CLK	O	DIR CONTROL SIGNAL(CLK)
46	P46	DIR_DI	I	DIR CONTROL SIGNAL(DI)
47	P45	DIR_DO	O	DIR CONTROL SIGNAL(DO)
48	P44	DIR_CS	O	DIR CONTROL SIGNAL(CS)
49	P43	ERROR	I	ERROR DETECT SIGNAL
50	P42	CFLUG	I	CH STATUS DETECT SIGNAL

PIN No	FUNCTION			DESCRIPTION
	PIN NAME	SYMBOL	I/O	
51	P41	EXT_INT	O	AUDIO STATUS SELECT SIGNAL7
52	P40	LFE_CONT	O	AUDIO STATUS SELECT SIGNAL8
53	P37	FLUG0A/HCS1	O	DSP1 CONTROL SIGNAL(W/R)
54	P36	FLUG0B/HCS2	O	DSP2 CONTROL SIGNAL(W/R)
55	P35	FLUG1A	I	DSP1 CONTROL SIGNAL(ACK)
56	P34	FLUG1B	I	DSP2 CONTROL SIGNAL(ACK)
57	P33	FLUG2A	I	DSP1 CONTROL SIGNAL(BUSY)
58	P32	FLUG2B	I	DSP2 CONTROL SIGNAL(BUSY)
59	P31	IRQ_B1	O	DSP1 CONTROL SIGNAL(REQ)
60	VCC	POWER INPUT	I	VCC
61	P30	IRQ_B2	O	DSP2 CONTROL SIGNAL(REQ)
62	VSS	POWER INPUT	I	GND
63	P27	I/O8	I/O	DATA BUS FOR DSP
64	P26	I/O7	I/O	DATA BUS FOR DSP
65	P25	I/O6	I/O	DATA BUS FOR DSP
66	P24	I/O5	I/O	DATA BUS FOR DSP
67	P23	I/O4	I/O	DATA BUS FOR DSP
68	P22	I/O3	I/O	DATA BUS FOR DSP
69	P21	I/O2	I/O	DATA BUS FOR DSP
70	P20	I/O1	I/O	DATA BUS FOR DSP
71	P17	FLUG3A	O	DSP1 CONTROL SIGNAL(BOOT)
72	P16	FLUG3B	O	DSP2 CONTROL SIGNAL(BOOT)
73	INT3	INT_1394	O	1394 CONTROL SIGNAL(INT)
74	P14	DSP_RST1	O	RESET OUTPUT FOR DSP1 / H=NEGATE , L=ASSERT
75	P13	DSP_RST2	O	RESET OUTPUT FOR DSP2 / H=NEGATE , L=ASSERT
76	P12	DSPOSCON	O	DSP1,2 OSC CONTROL SIGNAL / H=ON , L=OFF
77	P11	ROM_RST1	O	RESET OUTPUT FOR DSP ROM1 / H=NEGATE , L=ASSERT
78	P10	ROM_RST2	O	RESET OUTPUT FOR DSP ROM2 / H=NEGATE , L=ASSERT
79	P07	PLL_RST	O	RESET OUTPUT FOR PLL_IC / H=NEGATE , L=ASSERT
80	P06	PDET	I	POWER DETECT SIGNAL / H=ON , L=OFF
81	P05	RST	O	RESET OUTPUT FOR PERIPHERAL DEVICE / H=NEGATE , L=ASSERT
82	P04	BE_ON	I	BE STATUS DETECT SIGNAL / H=ACTIVE , L=STANBY
83	P03	1394_ON/OFF	O	+3.3V' POWER ON/OFF CONTROL SIGNAL FOR 1394 / H=ON , L=OFF
84	P02	-	O	NOT USED
85	P01	CL_SW	I	CLOSE_SW DETECT SIGNAL / H=NOT CLOSE , L=CLOSE
86	P00	OP_SW	I	OPEN_SW DETECT SIGNAL / H=NOT OPEN , L=OPEN
87	P107	-	O	NOT USED
88	P106	ON/ST	O	POWER ON/OFF CONTROL SIGNAL / H=POWER_ON , L=STANBY
89	AN5	JOGA	I	JOG DETECT SIGNAL1
90	AN4	JOGB	I	JOG DETECT SIGNAL2
91	AN3	REG	I	REGION DETECT SIGNAL
92	AN2	KEY21	I	KEY SCAN INPUT2
93	AN1	KEY11	I	KEY SCAN INPUT1
94	AVSS	ANA POWER	I	VCC
95	AN0	KEY01	I	KEY SCAN INPUT0
96	VREF	REFERENCE	I	VCC
97	AVCC	ANA POWER	I	GND
98	SIN4	TDO	O	NOT USED
99	SOUT4	TDI	O	NOT USED
100	CLK4	TCK	O	NOT USED

64M SDRAM (DS: IC806,906)

W986432DH

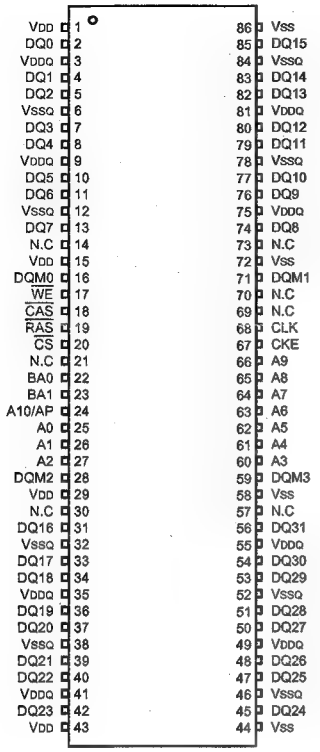


W986432DH Terminal Function

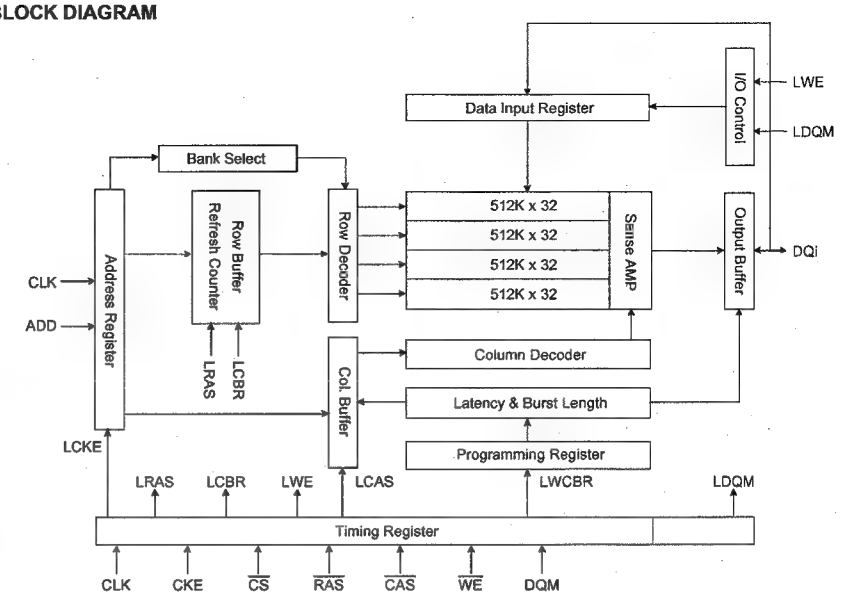
Pin No.	Pin Name	Function
25~27, 60~66, 24	A0-A10	Address for row and column
22, 23	BS0, BS1	Bank Select to activate during row address latch time
2, 4, 5, 7, 8, 10, 11 ,13, 31, 33, 34, 36, 37, 39, 40, 42, 45, 47, 48, 50, 51, 53, 54, 56, 74, 76, 77, 79, 80, 82, 83, 85	DQ0-DQ31	Data Input / Output pins for data
20	$\overline{CS}$	Chip Selec to disable or enable the command decoder
19	$\overline{RAS}$	Row Address Strobe
18	$\overline{CAS}$	Column Address Strobe
17	$\overline{WE}$	Write Enable
16, 28, 59, 71	DQM0-DQM3	Input / Out put Mask
68	CLK	Clock Inputs
67	CKE	Clock Enable
1, 15, 29, 43	Vcc	Power (+3.3V)
44, 58, 72, 86	Vss	Ground
3, 9, 35, 41, 49, 55, 75, 81	VccQ	Power (+3.3V) for I/O Buffer
6, 12, 32, 38, 46, 52, 78, 84	VssQ	Ground for I/O Buffer
14, 21, 30, 57, 69, 70, 73	NC	No Connection

K4S643232E (MA: IC701,VI: IC733)

PIN CONFIGURATION



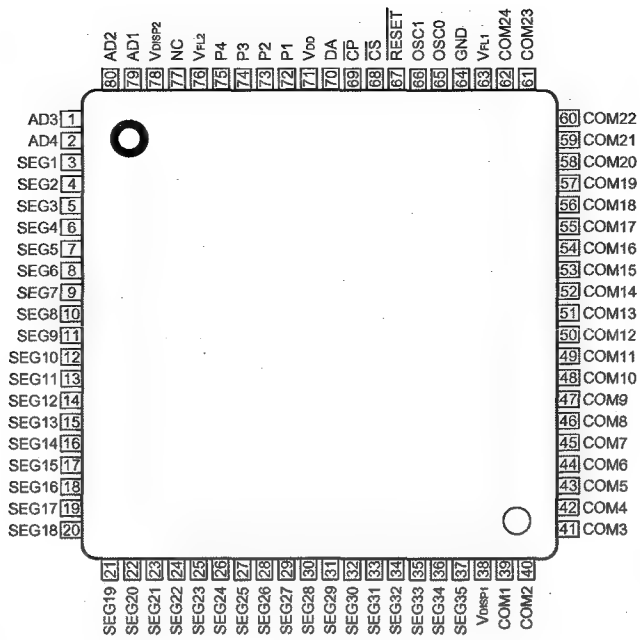
BLOCK DIAGRAM



PIN FUNCTION DESCRIPTION

Pin	Name	Input Function
CLK	*System clock*	Active on the positive going edge to sample all inputs.
$\overline{CS}$	*Chip select*	Disables or enables device operation by masking or enabling all inputs except CLK, CKE and DQM.
CKE	*Clock enable*	Masks system clock to freeze operation from the next clock cycle. CKE should be enabled at least one cycle prior to new command. Disables input buffers for power down mode.
A_0 ~ A_{10}	*Address*	Row/column addresses are multiplexed on the same pins. Row address : RA_0 ~ RA_{10}, Column address : CA_0 ~ CA_7
BA0,1	*Bank select address*	Selects bank to be activated during row address latch time. Selects bank for read/write during column address latch time.
$\overline{RAS}$	*Row address strobe*	Latches row addresses on the positive going edge of the CLK with $\overline{RAS}$ low. Enables row access & precharge.
$\overline{CAS}$	*Column address strobe*	Latches column addresses on the positive going edge of the CLK with $\overline{CAS}$ low. Enables column access.
$\overline{WE}$	*Write enable*	Enables write operation and row precharge. Latches data in starting from $\overline{CAS}$, $\overline{WE}$ active.
DQM0 ~ 3	*Data input/output mask*	Makes data output Hi-Z, t_{SHZ} after the clock and masks the output. Blocks data input when DQM active.
$DQ_{0 \sim 31}$	*Data input/output*	Data inputs/outputs are multiplexed on the same pins.
V_{DD}/V_{SS}	*Power supply/ground*	Power and ground for the input buffers and the core logic.
V_{DDQ}/V_{SSQ}	*Data output power/ground*	Isolated power supply and ground for the output buffers to provide improved noise immunity.
NC	*No Connection*	This pin is recommended to be left No connection on the device.

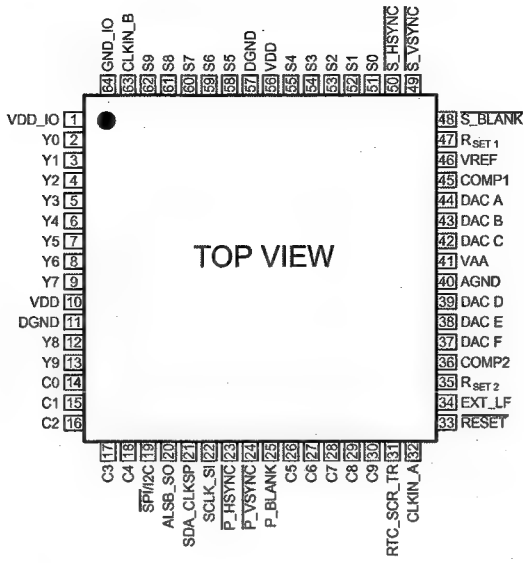
ML9207-03GP (AD: IC102)



ML9207-03GP Terminal Function

Pin No.	Pin Name	I/O	Function
3~37	SEG1~35	O	FL display anode drive output pin
39~62	COM1~24	O	FL display grid drive output pin
1,2, 79, 80	AD1~4	O	FL display anode drive output pin
72~75	P1~4	O	General port output pin
71	V_{DD}		V_{DD}-GND: Power supply for logic block V_{DISP}-V_{FL}: Power supply for FL display drive For V_{DD} and V_{DISP}, apply from same power source
38, 78	$V_{DISP1\sim2}$		
64	GND		
63, 76	$V_{FL1\sim2}$		
70	DA	I	Serial data input pin (positive logic)
69	$\overline{CP}$	I	Shift clock input pin
68	$\overline{CS}$	I	Chip select input pin
67	$\overline{RESET}$	I	Reset input pin
65	OSC0	I	Pin for self-oscillation
66	OSC1	O	

ADV7310 (VI: IC601,701)

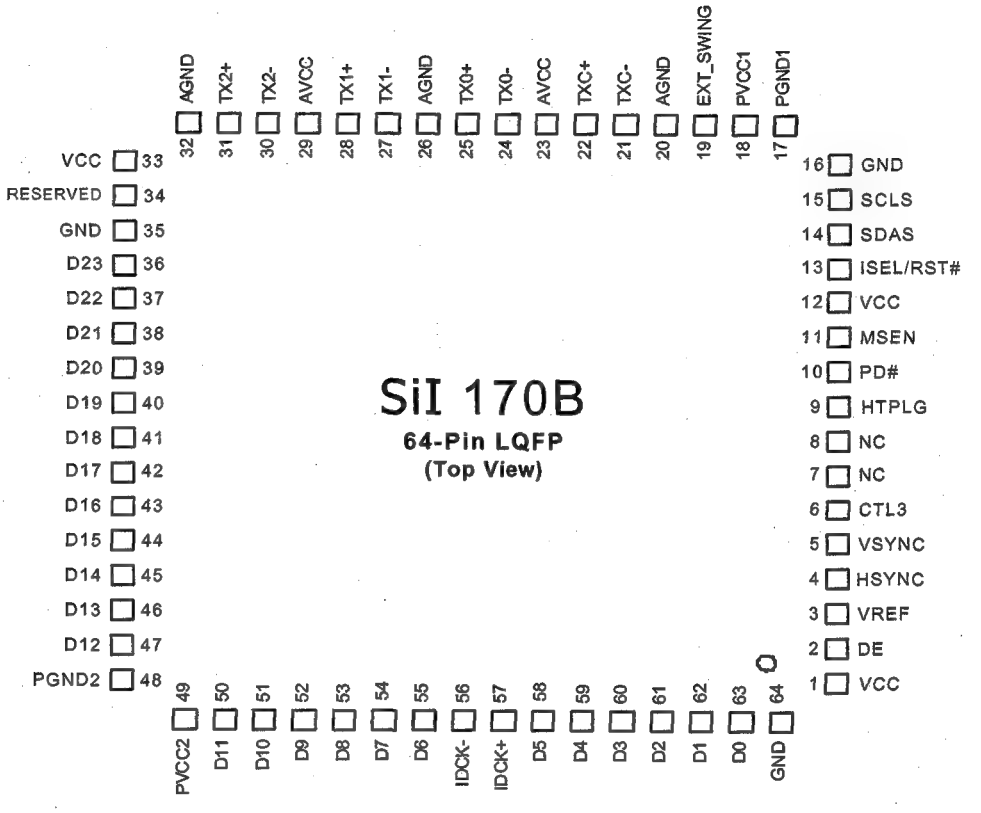


ADV7310 Terminal Function

Pin No.	Pin Name	I/O	Function
1	VDD_IO	P	Digital power supply.
2~9, 12, 13	Y9-0	I	10-Bit Progressive scan/ HDTV input port for Y data.
10, 56	VDD	P	Digital power supply.
11, 57	DGND	G	Digital Ground
14~18, 26~30	C9-0	I	10-Bit Progressive scan/ HDTV input port for CrCb color data in 4:2:2 input mode.
19	$\overline{SPI}$/I2C	I	When this input pin is brought low, the ADV7300 interfaces over the SPI port and uses this input as part of the 4 wire SPI interface. When this input pin is tied high [VDD_IO], the ADV7300 interfaces over the I2C port.
20	ALSB_SO	I/O	Multifunctional pin.
21	SDA_CLKSP	I/O	Multifunctional pin.
22	SCLK_SI	I	Multifunctional input.
23	$\overline{P\_HSYNC}$	I	Video Horizontal Sync Control Signal for HD sync in simultaneous SD/HD mode and HD only mode.
24	$\overline{P\_VSYNC}$	I	Video Vertical Sync Control Signal for HD sync in simultaneous SD/HD mode and HD only mode.
25	P_BLANK	I	Video Blanking Control Signal for HD sync in simultaneous SD/HD mode and HD only mode.
31	RTC_SCR_TR	I	Multifunctional input.
32	CLKIN_A	I	Pixel Clock Input for HD only or SD only modes.
33	$\overline{RESET}$	I	This input resets the on-chip timing generator and sets the ADV7300 into Default Register setting. Reset is an active low signal.
34	EXT_LF	I	External Loop filter for the internal PLL.
35, 47	RSET1,2	I	A1520 Ohms resistor must be connected from this pin to AGND and is used to control the amplitudes of the DAC outputs.
36,45	COMP	O	Compensation Pin for DACs.
37	DAC F	O	In SD only mode: Chroma/RED/V analog output. In HD only mode and simultaneus HD/SD: Pb/ BLUE (HD) analog output.
38	DAC E	O	In SD only mode: Luma/BLUE/U analog output. In HD only mode and simultaneus HD/SD: Pr/ RED (HD) analog output.
39	DAC D	O	In SD only mode: CVBS/GREEN/Y analog output. In HD only mode and simultaneus HD/SD: Y/ GREEN (HD) analog output.
40	AGND	G	Analog Ground
41	VAA	P	Analog power supply.
42	DAC C	O	Chroma/ RED/ V SD analog output.
43	DAC B	O	Luma/ BLUE/ U SD analog output.
44	DAC A	O	CVBS/ GREEN/ Y SD analog output.
46	VREF	I/O	Optional External Voltage Reference Input for DACs or Voltage Reference Output (1.235V).
48	$\overline{S\_BLANK}$	I/O	Video Blanking Control Signal for SD.
49	$\overline{S\_VSYNC}$	I/O	Video Vertical Sync Control Signal for SD.
50	$\overline{S\_HSYNC}$	I/O	Video Horizontal Control Signal for SD.
51~55, 58~62	S9-S0	I	10-Bit Standard Definition input port. Or Progressive Scan/ HDTV input port for Cr [Red/V] color data in 4:4:4 input mode.
63	CLKIN_B	I	Pixel Clock Input.
64	GND_IO	G	Digital Ground

Sil 170B (VI: IC504)

Pin Diagram



Pin Diagram

Pin Descriptions

Input Pins

Pin Name	Pin #	Type	Description
D23-D12	See Pin Diagram	In	Upper 12 bits of 24-bit pixel bus. Mode controlled by configuration register bit: When BSEL = HIGH, this bus inputs the top half of the 24-bit pixel bus. When BSEL = LOW, these bits are not used to input pixel data.
D11–D0	See Pin Diagram	In	Bottom half of 24-bit pixel bus / 12-bit pixel bus input. Mode controlled by configuration register bit: When BSEL = HIGH, this bus inputs the bottom half of the 24-bit pixel bus. When BSEL = LOW, this bus inputs ½ a pixel (12-bits) at every latch edge (both falling and/or rising) of the clock.
IDCK+	57	In	Input Data Clock +. This clock is used for all input modes.
IDCK-	56	In	Input Data Clock –. This clock is only used in 12-bit mode when dual edge clocking is turned off (DSEL = LOW). It is used to provide the ODD latching edges for multi-phased clocking. If (BSEL = HIGH) or (DSEL = HIGH) this pin is unused and should be tied to GND.
DE	2	In	Data enable. This signal is high when input pixel data is valid to the transmitter and low otherwise.
HSYNC	4	In	Horizontal Sync input control signal.
VSYNC	5	In	Vertical Sync input control signal.

Input Voltage Reference Pin

Pin Name	Pin #	Type	Description
VREF	3	Analog In	Must be tied to 3.3V.

Power Management Pin

Pin Name	Pin #	Type	Description
PD#	10	In	Power Down (active LOW). A HIGH level (3.3V) indicates normal operation and a LOW level (GND) indicates power down mode.

Differential Signal Data Pins

Pin Name	Pin #	Type	Description
TX0+	25	Analog	TMDS Low Voltage Differential Signal output data pairs.
TX0-	24	Analog	These pins are tri-stated when PD# is asserted.
TX1+	28	Analog	
TX1-	27	Analog	
TX2+	31	Analog	
TX2-	30	Analog	
TXC+	22	Analog	TMDS Low Voltage Differential Signal output clock pairs.
TXC-	21	Analog	These pins are tri-stated when PD# is asserted.
EXT_SWING	19	Analog	Voltage Swing Adjust. A resistor should tie this pin to AVCC. This resistor determines the amplitude of the voltage swing. A 510 ohm resistor is recommended for remote display applications. For notebook computers, 680 ohm is recommended.

Configuration/Programming Pins

Pin Name	Pin #	Type	Description
MSEN	11	Out	Monitor Sense. This pin is an open collector output. The output is programmable through the I^2C interface (see I^2C register definitions). An external 5K pull-up resistor is required on this pin.
RESERVED	34	In	This pin is reserved.
NC	7,8	NC	These pins are not electrically connected inside the package.

Control Pins

These control pins allow configuration of the transmitter through the slave I^2C port, which is required by HDCP.

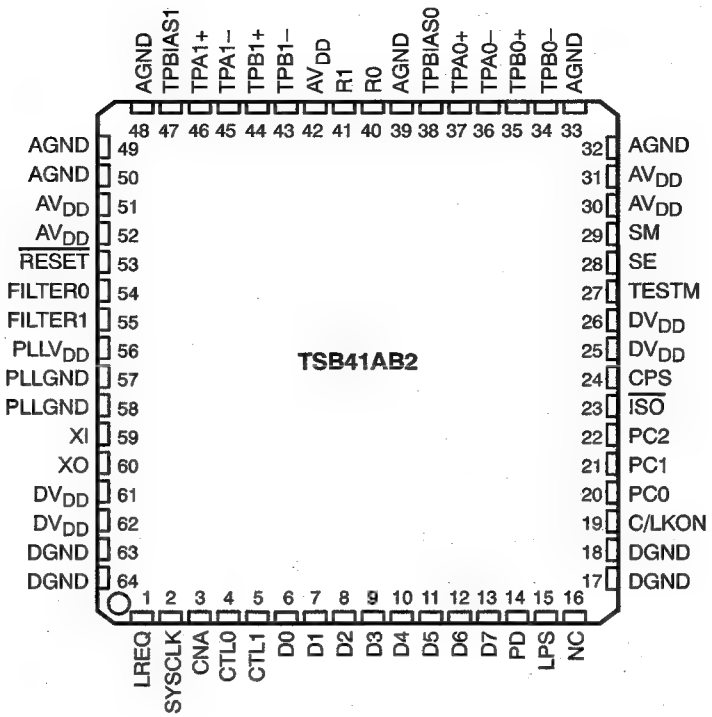
Pin Name	Pin #	Type	Description
ISEL/RST#	13	In	I^2C Interface Select. If HIGH, then the I^2C interface is active.
SCLS	15	In	DDC I^2C Clock.
SDAS	14	In/Out	DDC I^2C Data.
CTL3	6	In	External CTL3.
HTPLG	9	In	Monitor Charge Input. This pin is used to connect to the DVI Hot Plug pin to detect the presence of an attached monitor.

Power and Ground Pins

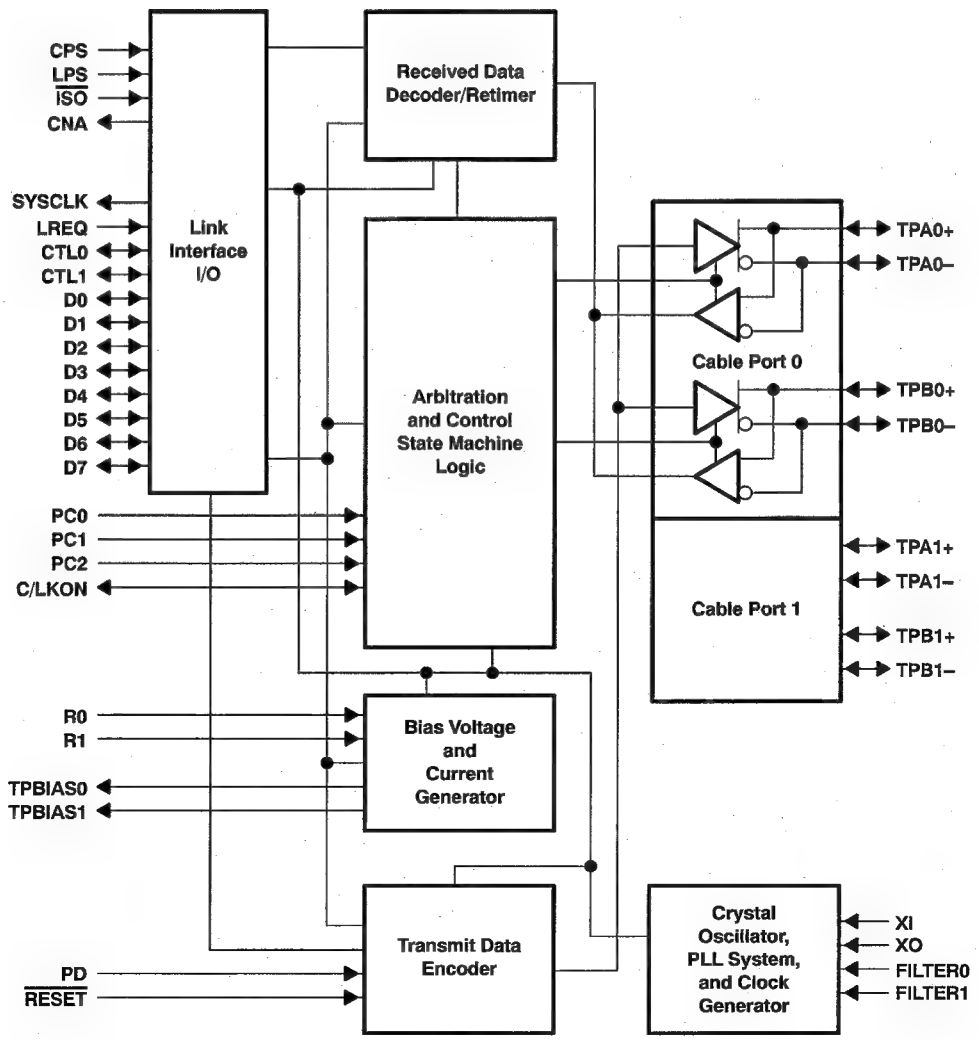
Pin Name	Pin #	Type	Description
VCC	1,12,33	Power	Digital VCC. Connect to 3.3V supply.
GND	16,35,64	Ground	Digital GND.
AVCC	23,29	Power	Analog VCC. Connect to 3.3V supply.
AGND	20,26,32	Ground	Analog GND.
PVCC1	18	Power	Primary PLL Analog VCC. Connect to regulated 3.3V supply.
PVCC2	49	Power	Filter PLL Analog VCC. Connect to regulated 3.3V supply.
PGND1	17	Ground	PLL Analog GND.
PGND2	48	Ground	PLL Analog GND.

TSB41AB2 (IE: IC111))

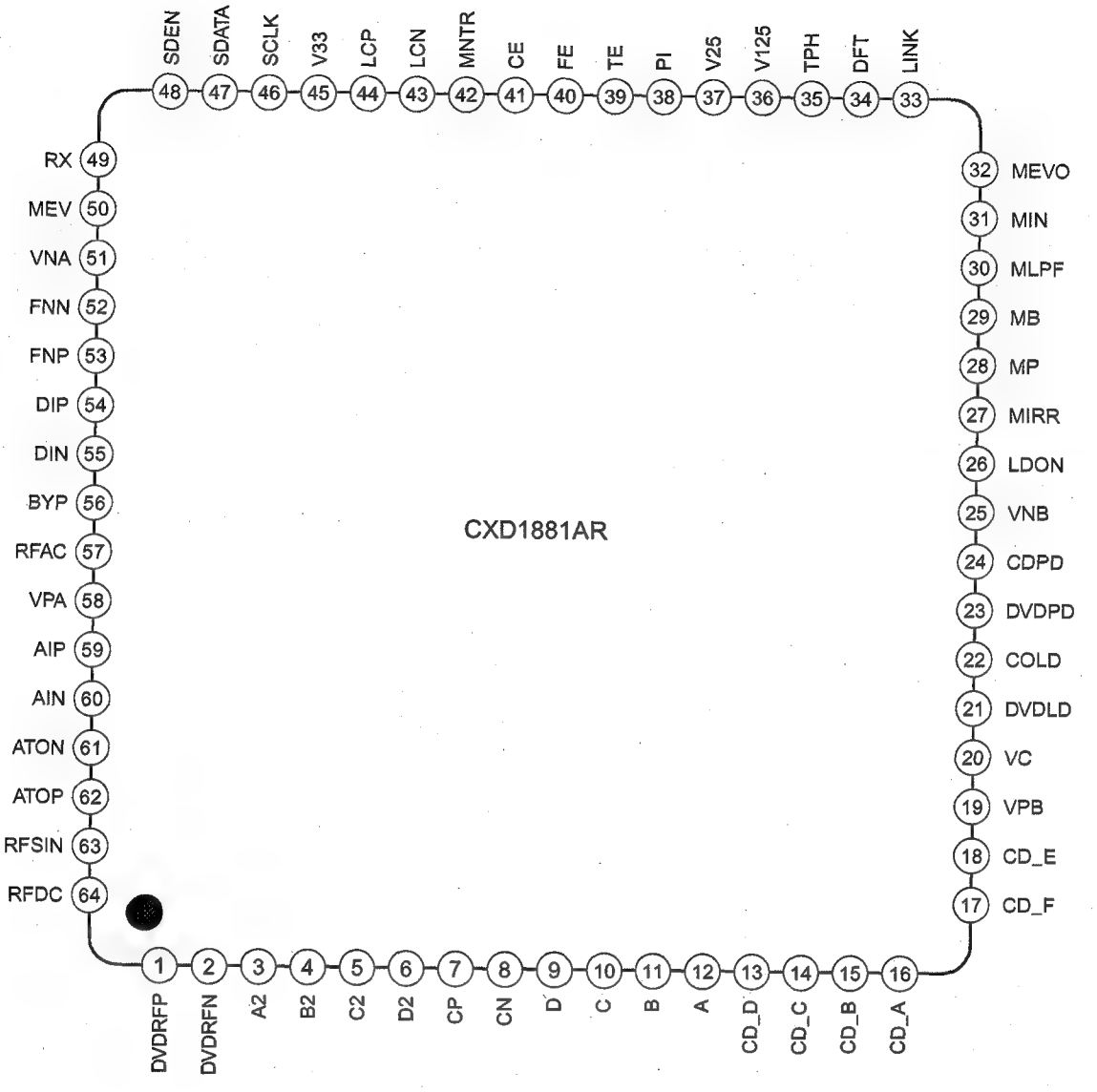
PAP PACKAGE
(TOP VIEW)

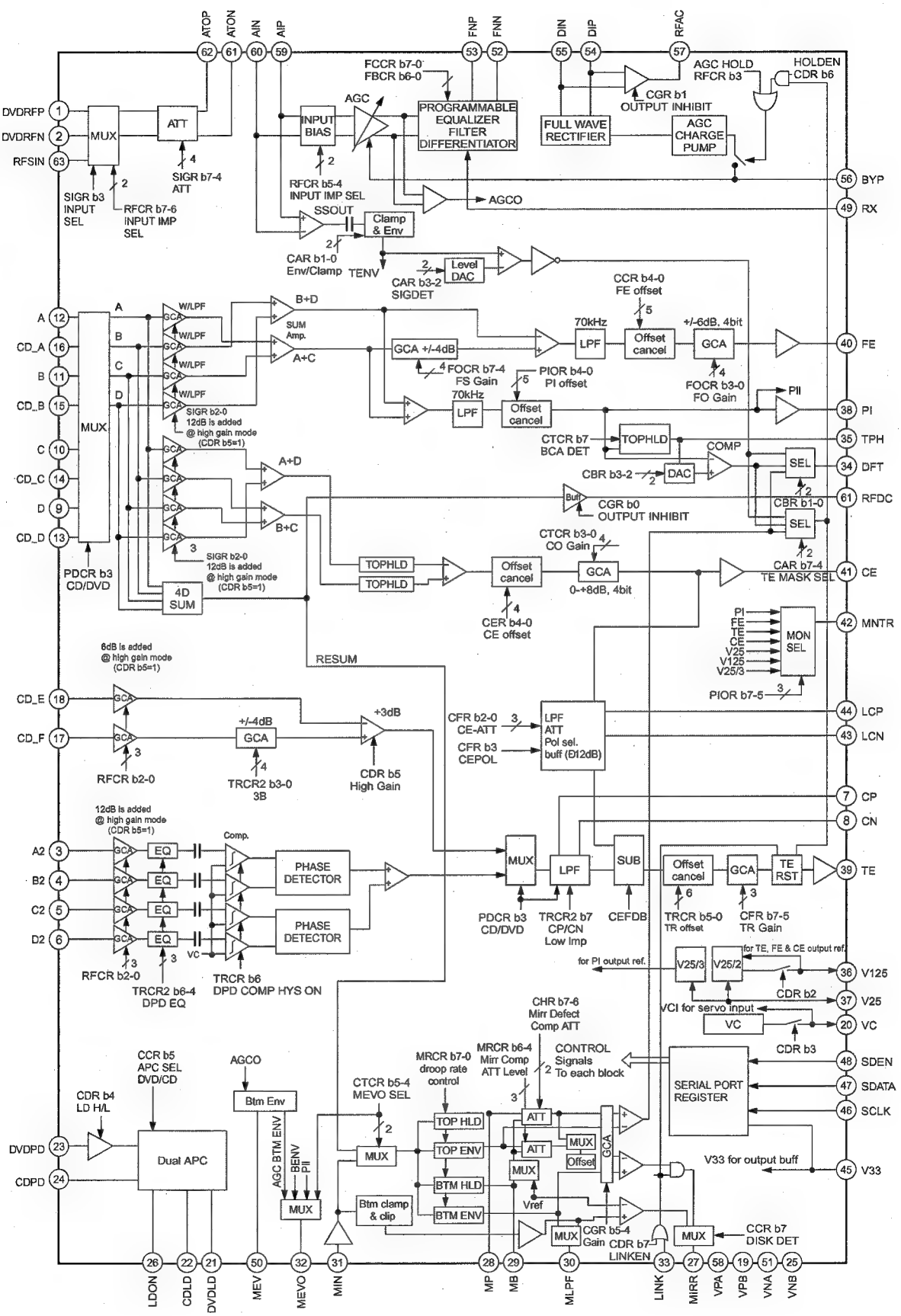


block diagram



CXD1881AR (MA: IC502)




ATOP
ATON
AIN
AIP
FNP
FNN
DIN
DIP
RFAC
DVDRFP
DVDRFN
RFSIN
MUX
ATT
SIGR b7-4 ATT
SIGR b3 INPUT SEL
RFCR b7-6 INPUT IMP SEL
INPUT BIAS
AGC
FCCR b7-0
FBCR b6-0
PROGRAMMABLE EQUALIZER FILTER DIFFERENTIATOR
FULL WAVE RECTIFIER
AGC CHARGE PUMP
CGR b1 OUTPUT INHIBIT
AGC HOLD RFCR b3
HOLDEN CDR b6
RFCR b5-4 INPUT IMP SEL
AGCO
SSOUT
Clamp & Env
CAR b1-0 Env/Clamp
TENV
CAR b3-2 SIGDET
Level DAC
BYP
RX
A
B
C
D
CD_A
CD_B
CD_C
CD_D
W/LPF
GCA
B+D
A+C
A+D
B+C
SUM Amp.
SIGR b2-0 12dB is added @ high gain mode (CDR b5=1)
PDCR b3 CD/DVD
4D SUM
GCA +/-4dB
FOCR b7-4 FS Gain
PIOR b4-0 PI offset
70kHz
LPF
Offset cancel
CCR b4-0 FE offset
+/-6dB, 4bit
FOCR b3-0 FO Gain
FE
PII
PI
CTCR b7 BCA DET
TOPHLD
TPH
COMP
DAC
CBR b3-2
SEL
DFT
CBR b1-0
RFDC
Buff
CGR b0 OUTPUT INHIBIT
CTCR b3-0 CO Gain
CAR b7-4 TE MASK SEL
CE
CER b4-0 CE offset
0-+8dB, 4bit
RESUM
MON SEL
MNTR
PIOR b7-5
6dB is added @ high gain mode (CDR b5=1)
CD_E
CD_F
RFCR b2-0
+/-4dB
TRCR2 b3-0 3B
+3dB
CDR b5 High Gain
CFR b2-0 CE-ATT
CFR b3 CEPOL
LPF ATT Pol sel. buff (Ð12dB)
LCP
LCN
CP
CN
12dB is added @ high gain mode (CDR b5=1)
A2
B2
C2
D2
EQ
Comp.
PHASE DETECTOR
VC
RFCR b2-0
TRCR2 b6-4 DPD EQ
TRCR b6 DPD COMP HYS ON
MUX
LPF
SUB
PDCR b3 CD/DVD
TRCR2 b7 CP/CN Low Imp
CEFDB
Offset cancel
GCA
TE RST
TRCR b5-0 TR offset
CFR b7-5 TR Gain
TE
for PI output ref.
for TE, FE & CE output ref.
V25/3
V25/2
V125
CDR b2
V25
VCI for servo input
VC
CDR b3
CHR b7-6 Mirr Defect Comp ATT
CONTROL Signals To each block
MRCR b6-4 Mirr Comp ATT Level
MRCR b7-0 droop rate control
CTCR b5-4 MEVO SEL
CCR b5 APC SEL DVD/CD
CDR b4 LD H/L
AGCO
Btm Env
DVDPD
CDPD
Dual APC
AGC BTM ENV
BENV
PII
TOP HLD
TOP ENV
BTM HLD
BTM ENV
Btm clamp & clip
ATT
Offset
Vref
CGR b5-4 Gain
CDR b7 LINKEN
CCR b7 DISK DET
SERIAL PORT REGISTER
SDEN
SDATA
SCLK
V33 for output buff
V33
LDON
CDLD
DVDLD
MEV
MEVO
MIN
MP
MB
MLPF
LINK
MIRR
VPA
VPB
VNA
VNB

Terminal Function

Power Supply Pins

Name	I/O	Function
VPA	-	Power for RF and serial port
VPB	-	Power for servo
VNA	-	GND for RF and serial port
VNB	-	GND for servo
V33	-	Power for output buffer
V25	-	Reference Power for servo output

Input Pins

Name	I/O	Function
DVDRFP,DVDRFN	I	RF signal input
RFSIN	I	RF signal input
AIP,AIN	I	AGC amp. input
DIP,DIN	I	Analog input for RF single buffer
A,B,C,D	I	Photo detector interface input
A2,B2,C2,D2	I	Photo detector interface input
CD_A,B,C,D	I	CD photo detector interface input
CD_E,F	I	CD photo detector interface input
MIN	I	RF signal input for mirror
DVDPD	I	APC input
CDPD	I	APC input
LDON	I	APC input ON/OFF (L:Open)
LINK	I	Link signal input (L:Open)
	O	Mirror monitor output

Output Pins

Name	I/O	Function
ATOP,ATON	O	Differential attenuator output
FNP,FNN	O	Differential normal output
RFAC	O	Single end normal output
RFDC	O	RF signal output
FE	O	Focus error signal output
TE	O	Tracking error signal output
CE	O	Center error signal output
MEVO	O	RFDDC bottom envelope output
DFT	O	Defect output
MIRR	O	Mirror detected output
PI	O	Pull-in signal output
DVDLD	O	APC output
CDLD	O	APC output
MNTR	O	Monitor output

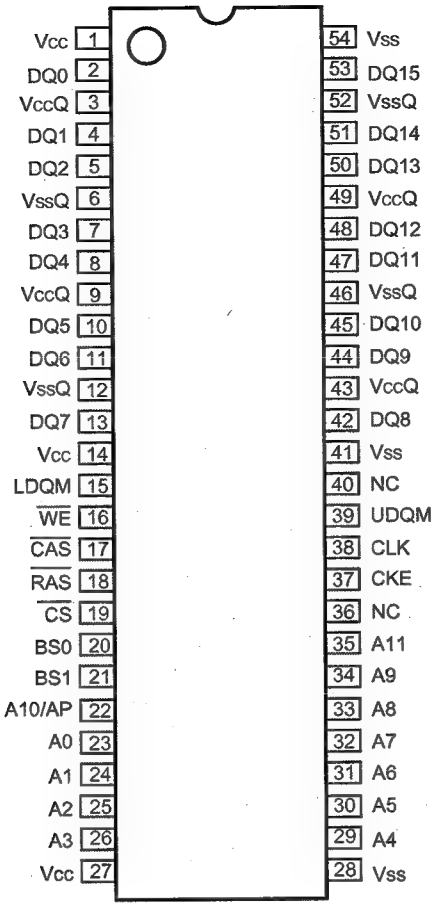
Analog Pins

Name	I/O	Function
BYP	-	RF AGC integration capacitor connecting terminal
CP	-	Differential phase tracking LPF terminal
CN	-	Differential phase tracking LPF terminal
LCP	-	Lens shift offset cancel LPF terminal
LCN	-	Lens shift offset cancel LPF terminal
MP	-	MIRR top hold terminal
MB	-	MIRR bottom hold terminal
MEV	-	RFDC bottom envelope terminal
MLPF	-	Mirror LPF terminal
TPH	-	PI top hold terminal
VC	-	Reference voltage output
V125	-	Reference voltage output
RX	-	Reference resistor input

Serial Port Pins

Name	I/O	Function
SDEN	I	Serial data enable
SDATA	I/O	Serial data
SCLK	I	Serial clock

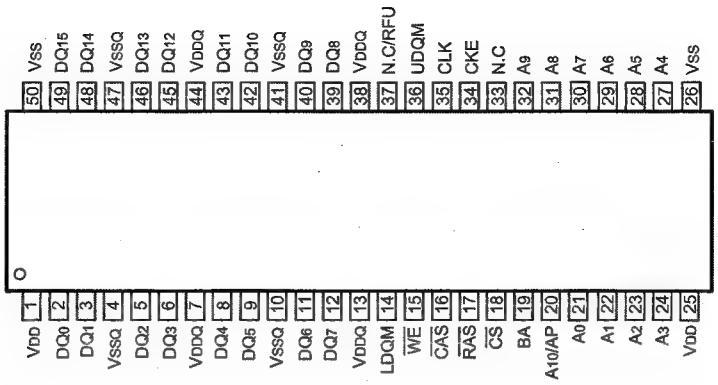
W986416DH (MA: IC114)



W986416DH Terminal Function

Pin No.	Pin Name	Function	Description
1, 14, 27	Vcc	Power (+3.3V)	Power for input buffers and logic circuit inside DRAM.
2, 4, 5, 7, 8, 10, 11, 13, 42, 44, 45, 47, 48, 50, 51, 53	DQ0-DQ15	Data Input/Output	Multiplexed pins for data output and input.
3, 9, 43, 49	VccQ	Power (+3.3V) for I/O buffer	Separated power from VCC, to improve DQ noise immunity.
6, 12, 46, 52	VssQ	Ground for I/O buffer	Separated ground from VSS, to improve DQ noise immunity.
16	$\overline{WE}$	Write Enable	Referred to $\overline{RAS}$.
17	$\overline{CAS}$	Column Address Strobe	Referred to $\overline{RAS}$.
18	$\overline{RAS}$	Row Address Strobe	Command input. When sampled at the rising edge of the clock $\overline{RAS}$, $\overline{CAS}$ and $\overline{WE}$ define the operation to be executed.
19	$\overline{CS}$	Chip Select	Disable or enable the command decoder. When command decoder is disabled, new command is ignored and previous operation continues.
20, 21	BS0, BS1	Bank Select	Select bank to activate during row address latch time, or bank to read/write during address latch time.
23~26, 22 29~35	A0-A11	Address	Multiplexed pins for row and column address. Row address: A0-A11. Column address: A0-A7. A10 is sampled during a precharge command to determine if all banks are to be precharged or bank selected by BS0, BS1.
28, 41, 54	Vss	Ground	Ground for input buffers and logic circuit inside DRAM.
36, 40	NC	No Connection	No Connection
37	CKE	Clock Enable	CKE controls the clock activation and deactivation. When CKE is low, Power Down mode, Suspend mode, or Self Refresh mode is entered.
38	CLK	Clock Inputs	System clock used to sample inputs on the rising edge of clock.
39, 15	UDQM, LDQM	Input/Output mask	The output buffer is placed at Hi-Z (with latency of 2) when DQM is sampled high in read cycle. In write cycle, sampling DQM high will block the write operation with zero latency.

16M SDRAM (MA: IC402)

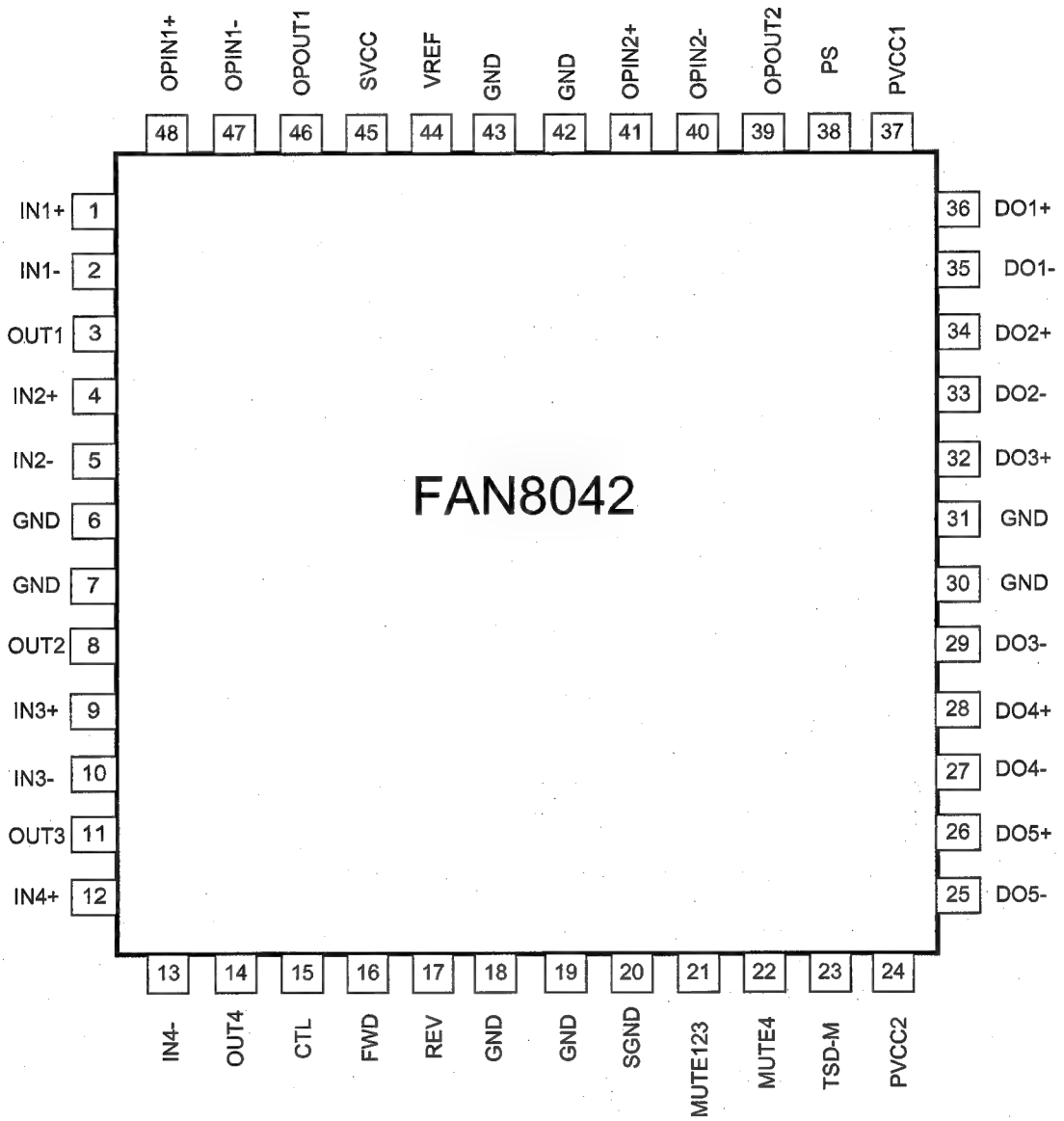


Terminal Function

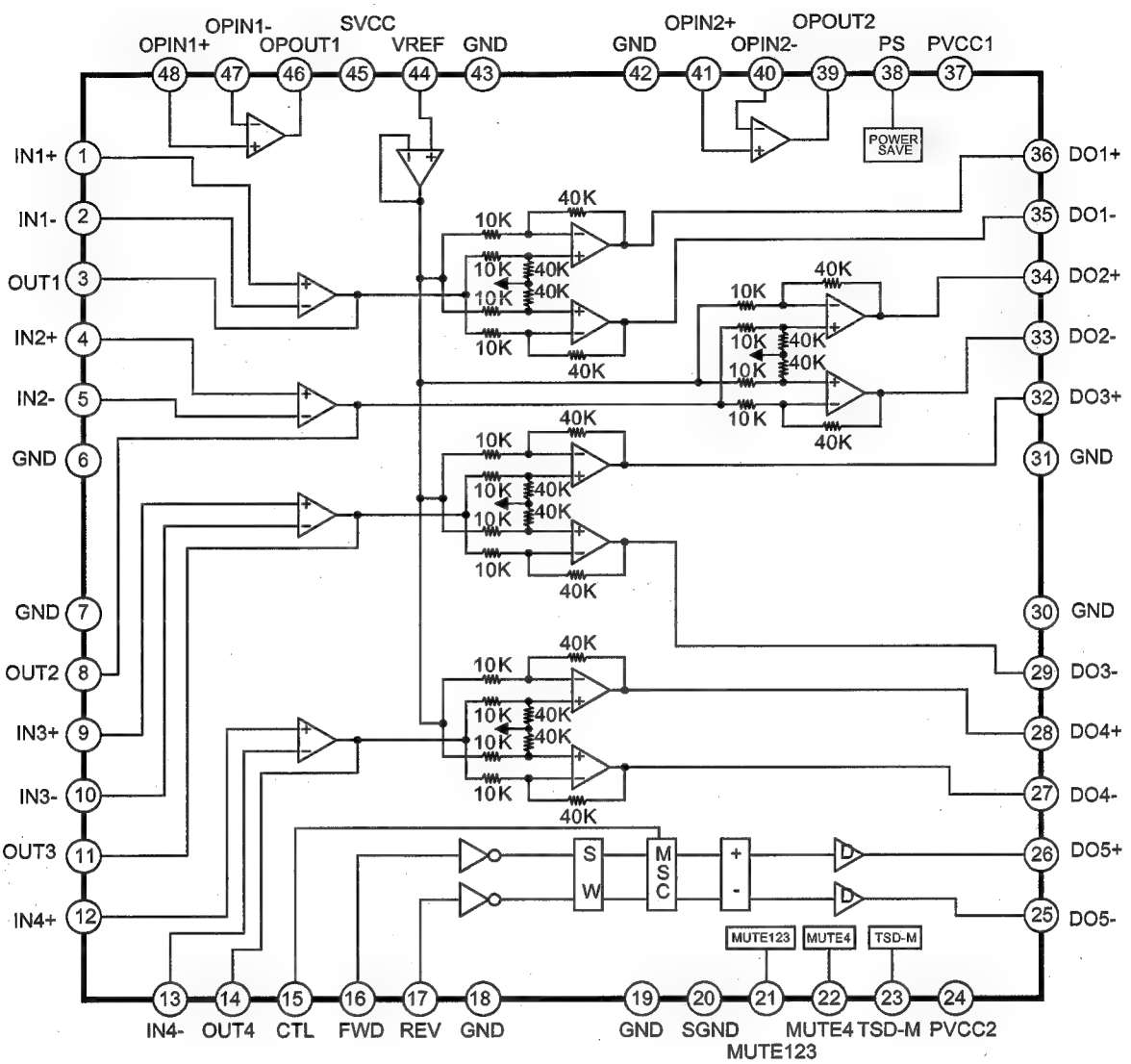
Pin No.	Pin Name	Symbol	Function
1	V_{DD}	Power Supply/Ground	Power and ground for the input buffer and the core logic
2	DQ_0	Data Input/Output	Data input/output are mutiplexed on the same pin
3	DQ_1	Data Input/Output	Data input/output are mutiplexed on the same pin
4	V_{SSQ}	Data Output Power/Ground	Isolated power supply and ground for the output buffer
5	DQ_2	Data Input/Output	Data input/output are mutiplexed on the same pin
6	DQ_3	Data Input/Output	Data input/output are mutiplexed on the same pin
7	V_{DDQ}	Data Output Power/Ground	Isolated power supply and ground for the output buffer
8	DQ_4	Data Input/Output	Data input/output are mutiplexed on the same pin
9	DQ_5	Data Input/Output	Data input/output are mutiplexed on the same pin
10	V_{SSQ}	Data Output Power/Ground	Isolated power supply and ground for the output buffer
11	DQ_6	Data Input/Output	Data input/output are multiplexed on the same pin
12	DQ_7	Data Input/Output	Data input/output are multiplexed on the same pin
13	V_{DDQ}	Data Output Power/Ground	Isolated power supply and ground for the output buffer
14	L DQM	Data Input/Output Mask	Blocks data input when active
15	$\overline{WE}$	Write Enable	Enables write operation and row precharge
16	$\overline{CAS}$	Column Address Strobe	Latches column address on the positive going edge of the CLK at low
17	$\overline{RAS}$	Row Address Strobe	Latches row address on the positive going edge of the CLK at low
18	$\overline{CS}$	Chip Select	Disables or enables device operation by masking or enabling all inputs except CLK, CKE, and LDQM
19	BA	Bank Select Address	Selects bank to be activated during row address latch time
20	A_{10}/AP	Address	Row/column addresses are multiplexed on the same pin
21	A_0	Address	Row/column addresses are multiplexed on the same pin
22	A_1	Address	Row/column addresses are multiplexed on the same pin
23	A_2	Address	Row/column addresses are multiplexed on the same pin
24	A_3	Address	Row/column addresses are multiplexed on the same pin
25	V_{DD}	Power Supply/Ground	Power and ground for the input buffer and the core logic
26	V_{SS}	Power Supply/Ground	Power and ground for the input buffer and the core logic
27	A_4	Address	Row/column addresses are multiplexed on the same pin
28	A_5	Address	Row/column addresses are multiplexed on the same pin
29	A_6	Address	Row/column addresses are multiplexed on the same pin
30	A_7	Address	Row/column addresses are multiplexed on the same pin
31	A_8	Address	Row/column addresses are multiplexed on the same pin
32	A_9	Address	Row/column addresses are multiplexed on the same pin
33	N. C	No Connection	No connect pin
34	CKE	Clock Enable	Masks system clock to freeze operation from the next clock cycle
35	CLK	System Clock	Active on the positive going edge to sample all inputs
36	U DQM	Data Input/Output Mask	Blocks data input when active
37	N. C/RFU	NC/Reserved	No connect pin
38	V_{DDQ}	Data Output Power/Ground	Isolated power supply and ground for the output buffer
39	DQ_8	Data Input/Output	Data input/output are multiplexed on the same pin
40	DQ_9	Data Input/Output	Data input/output are multiplexed on the same pin
41	V_{SSQ}	Data Output Power/Ground	Isolated power supply and ground for the output buffer
42	DQ_{10}	Data Input/Output	Data input/output are multiplexed on the same pin
43	DQ_{11}	Data Input/Output	Data input/output are multiplexed on the same pin
44	V_{DDQ}	Data Output Power/Ground	Isolated power supply and ground for the output buffer
45	DQ_{12}	Data Input/Output	Data input/output are multiplexed on the same pin
46	DQ_{13}	Data Input/Output	Data input/output are multiplexed on the same pin
47	V_{SSQ}	Data Output Power/Ground	Isolated power supply and ground for the output buffer
48	DQ_{14}	Data Input/Output	Data input/output are multiplexed on the same pin
49	DQ_{15}	Data Input/Output	Data input/output are multiplexed on the same pin
50	V_{SS}	Power Supply/Ground	Power and ground for the input buffer and the core logic

FAN8042 (MA: IC503)

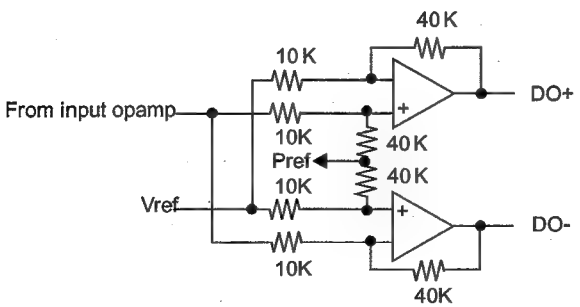
Pin Assignments



Block Diagram



Note. Detailed circuit of the output power amp

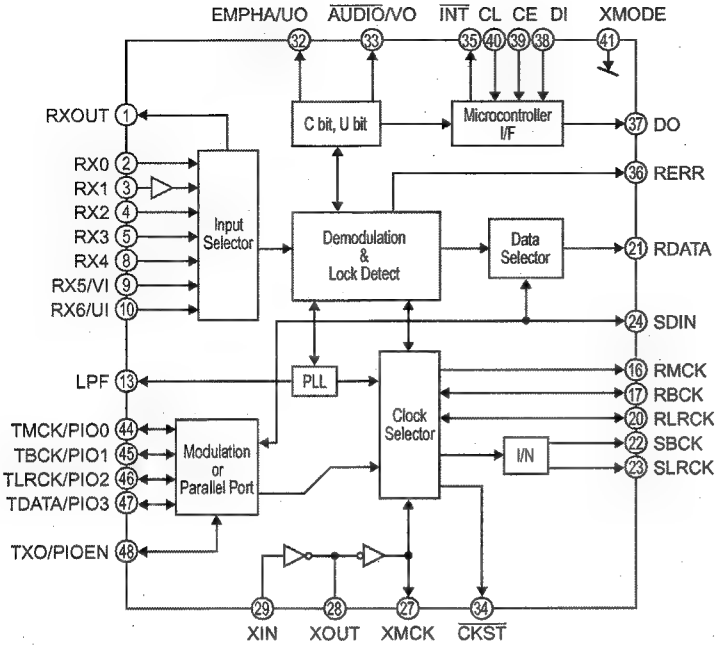


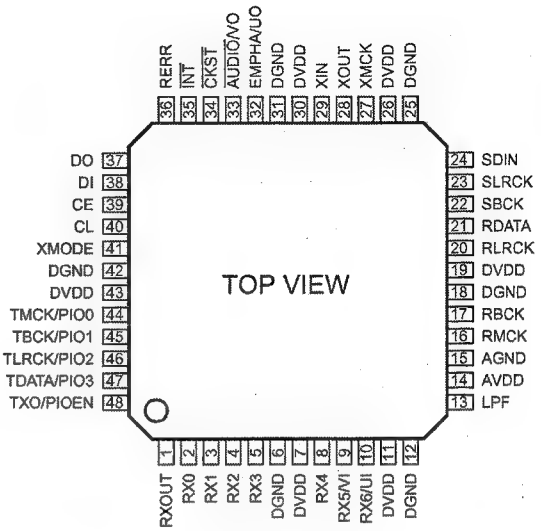
Pref1 is almost PVCC1 / 2
Pref2 is almost PVCC2 / 2

Pin Definitions

Pin Number	Pin Name	I/O	Pin Function Descrition
1	IN1+	I	CH1 op-amp input (+)
2	IN1-	I	CH1 op-amp input (-)
3	OUT1	O	CH1 op-amp output
4	IN2+	I	CH2 op-amp input (+)
5	IN2-	I	CH2 op-amp input (-)
6	GND	-	Ground
7	GND	-	Ground
8	OUT2	O	CH2 op-amp output
9	IN3+	I	CH3 op-amp input (+)
10	IN3-	I	CH3 op-amp input (-)
11	OUT3	O	CH3 op-amp output
12	IN4+	I	CH4 op-amp input (+)
13	IN4-	I	CH4 op-amp input (-)
14	OUT4	O	CH4 op-amp output
15	CTL	I	CH5 motor speed control
16	FWD	I	CH5 forward input
17	REV	I	CH5 reverse input
18	GND	-	Ground
19	GND	-	Ground
20	SGND	-	Signal Ground
21	MUTE123	I	Mute for CH1,2,3
22	MUTE4	I	Mute for CH4
23	TSD-M	O	TSD monitor
24	PVCC2	-	Power supply voltage 2 (For CH4,CH5)
25	DO5-	O	CH5 drive output (-)
26	DO5+	O	CH5 drive output (+)
27	DO4-	O	CH4 drive output (-)
28	DO4+	O	CH4 drive output (+)
29	DO3-	O	CH3 drive output (-)
30	GND	-	Ground
31	GND	-	Ground
32	DO3+	O	CH3 drive output (+)
33	DO2-	O	CH2 drive output (-)
34	DO2+	O	CH2 drive output (+)
35	DO1-	O	CH1 drive output (-)
36	DO1+	O	CH1 drive output (+)
37	PVCC1	-	Power supply voltage 1 (FOR CH1 CH2,CH3)
38	PS	I	Power save
39	OPOUT2	O	Normal op-amp2 output
40	OPIN2-	I	Normal op-amp2 input (-)
41	OPIN2+	I	Normal op-amp2 input (+)
42	GND	-	Ground
43	GND	-	Ground
44	VREF	I	Bias voltage input
45	SVCC	-	Signal & OPAMPs supply voltage
46	OPOUT1	O	Normal op-amp1 output
47	OPIN1-	I	Normal op-amp1 input (-)
48	OPIN1+	I	Normal op-amp1 input (+)

LC89057W (AD: IC302)





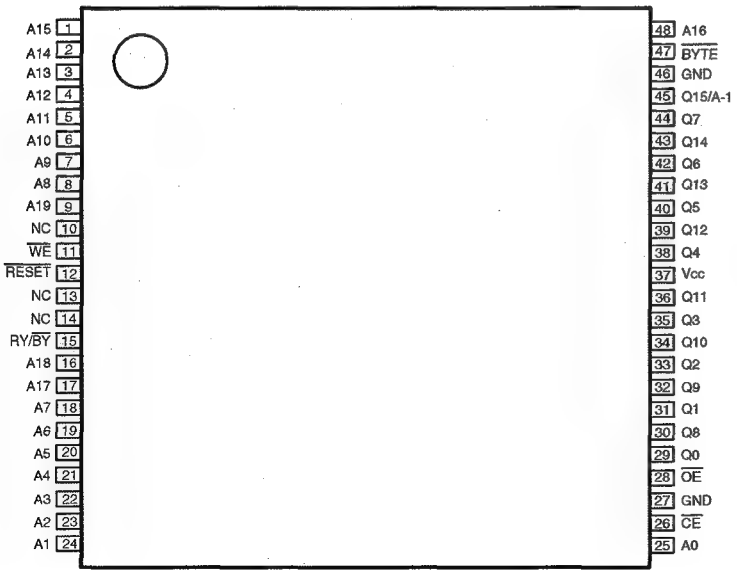
LC89057W Terminal Function

Pin No.	Pin Name	I/O	Function
1	RXOUT	O	Input bi-phase select data output terminal
2	RX0	I	TTL compatible digital data input terminal
3	RX1	I	Coaxial compatible amp built-in digital data input terminal
4	RX2	I	TTL compatible digital data input terminal
5	RX3	I	TTL compatible digital data input terminal
6	DGND	—	Digital GND
7	DVDD	—	Digital power
8	RX4	I	TTL compatible digital data input terminal
9	RX5/VI	I	TTL compatible digital data/Validity flag input terminal for modulation
10	RX6/UI	I	TTL compatible digital data/User data input terminal for modulation
11	DVDD	—	Digital power for PLL
12	DGND	—	Digital GND for PLL
13	LPF	O	PLL loop filter connecting terminal
14	AVDD	—	Analog power for PLL
15	AGND	—	Analog GND for PLL
16	RMCK	O	RMCK clock output terminal (256fs, 512fs, XIN, VCO)
17	RBCK	O/I	RBCK clock in/output terminal (64fs)
18	DGND	—	Digital GND
19	DVDD	—	Digital power
20	RLRCK	O/I	RLRCK clock in/output terminal (fs)
21	RDATA	O	Serial audio data output terminal
22	SBCK	O	SBCK clock output terminal (32fs, 64fs, 128fs)
23	SLRCK	O	SLRCK clock output terminal (fs/2, fs, 2fs)
24	SDIN	I	Serial audio data input terminal
25	DGND	—	Digital GND
26	DVDD	—	Digital power
27	XMCK	O	Osc. amp output terminal

Pin No.	Pin Name	I/O	Function
28	XOUT	O	X'tal osc. connecting output terminal
29	XIN	I	X'tal osc. connection, external clock input terminal (24.576MHz or 12.288MHz)
30	DVDD	—	Digital power
31	DGND	—	Digital GND
32	EMPHA/UO	I/O	Emphasis information/U-data output/Chip address setting terminal
33	AUDIO/VO	I/O	Non-PCM detect/V-flag output/ Chip address setting terminal
34	CKST	I/O	Clock switch transition period output/Demodulation master or slave function switching terminal
35	INT	I/O	Interrupt output for ∝com (Interrupt factor selectable)/Modulation or general I/O switching terminal
36	RERR	O	PLL lock error, data error flag output
37	DO	O	∝com I/F, read out data output terminal (3-state)
38	DI	I	∝com I/F, write data input terminal
39	CE	I	∝com I/F, chip enable input terminal
40	CL	I	∝com I/F, clock input terminal
41	XMODE	I	System reset input terminal
42	DGND	—	Digital GND
43	DVDD	—	Digital power
44	TMCK/PIO0	I/O	256fs system clock input for modulation/General I/O in/output terminal
45	TBCK/PIO1	I/O	64fs bit clock input for modulation/General I/O in/output terminal
46	TLRCK/PIO2	I/O	fs clock input for modulation/General I/O in/output terminal
47	TDATA/PIO3	I/O	Serial audio data input for modulation/General I/O in/output terminal
48	TXO/PIOEN	O/I	Modulation data output/ General I/O enable input terminal

* For latch-up countermeasure, perform each power supply ON/OFF in the same timing.

MX29LV160BTC-90 (MA: IC104)

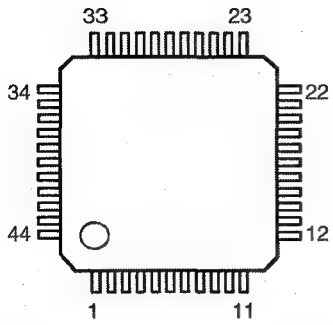


Pin Description

Symbol	Pin Name
A0~A19	Address Input
Q0~Q14	Data Input/Output
Q15/A-1	Q15 (Word mode)/LSB addr (Byte mode)
$\overline{CE}$	Chip Enable Input
$\overline{WE}$	Write Enable Input
$\overline{BYTE}$	Word/Byte Selection input
$\overline{RESET}$	Hardware Reset Pin/Sector Protect Unlock
$\overline{OE}$	Output Enable Input
RY/$\overline{BY}$	Ready/Busy Output
Vcc	Power Supply Pin (2.7V~3.6V)
GND	Ground Pin

SM5819AF (MA: IC801)

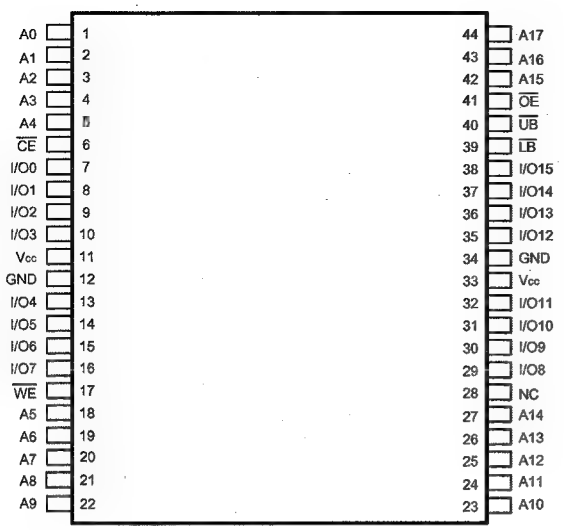
AK4101VQ (AD: IC301)



AK4101VQ Terminal Function

Pin No.	Pin Name	I/O	Function
1	PDN	I	Power down and reset pin
2	MCLK	I	Master clock input pin
3	SDTI1	I	Audio serial data input 1 pin
4	SDTI2	I	Audio serial data input 2 pin
5	SDTI3	I	Audio serial data input 3 pin
6	SDTI4	I	Audio serial data input 4 pin
7	VDD	—	Power pin, 4.75V ~ 5.25V
8	VSS	—	Ground pin
9	BICK	I/O	Audio serial data clock in/out pin
10	LRCK	I/O	In/out channel clock pin
11	FS0	I	Sampling frequency select 0 pin (sync. mode)
	CSN	I	Host I/F chip select pin (async. mode)
	AKMODE	I	AK4112A mode pin (audio rooting mode)
12	FS1	I	Sampling frequency select 1 pin (sync. mode)
	CDTI	I	Host I/F data input pin (async. mode)
13	FS2	I	Sampling frequency select 2 pin (sync. mode)
	CCLK	I	Host I/F bit clock input pin (async. mode)
14	FS3	I	Sampling frequency select 3 pin (sync. mode)
	CDTO	O	Host I/F data output pin (async. mode)
15	C1	I	CH1 status bit input pin
16	C2	I	CH2 status bit input pin
17	C3	I	CH3 status bit input pin
18	C4	I	CH4 status bit input pin
19	ANS	I	Async./Sync. mode select pin
20	BLS	I/O	Block start in/out pin
21	CKS0	I	Clock mode select 0 pin
22	VSS	—	Ground pin
23	CKS1	I	Clock mode select 1 pin
24	TXN4	O	CH4 differential inverted output pin
25	TXP4	O	CH4 differential non-inverted output pin
26	TXN3	O	CH3 differential inverted output pin
27	TXP3	O	CH3 differential non-inverted output pin
28	VDD	—	Power pin, 4.75V ~ 5.25V
29	VSS	—	Ground pin
30	TXN2	O	CH2 differential inverted output pin
31	TXP2	O	CH2 differential non-inverted output pin
32	TXN1	O	CH1 differential inverted output pin
33	TXP1	O	CH1 differential non-inverted output pin
34	DIF0	I	Audio serial I/F select 0 pin
35	VDD	—	Power pin, 4.75V ~ 5.25V
36	DIF1	I	Audio serial I/F select 1 pin
37	DIF2	I	Audio serial I/F select 2 pin
38	U1	I	CH1 user data bit input pin
39	U2	I	CH2 user data bit input pin
40	U3	I	CH3 user data bit input pin
41	U4	I	CH4 user data bit input pin
42	V12	I	CH1&2 validity bit input pin
43	V34	I	CH3&4 validity bit input pin
44	TRANS	I	Audio rooting mode pin (sync. mode)

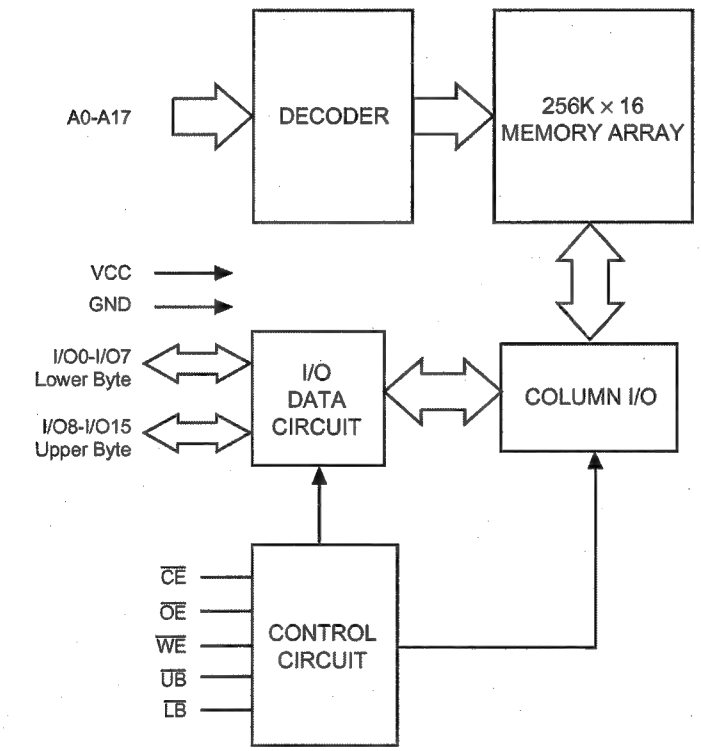
IC61LV25616 (IE: IC402)



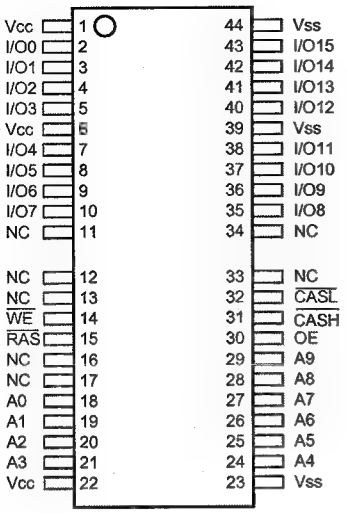
Pin Description

Symbol	Pin Name
A0~A17	Address Inputs
I/O0-I/O15	Data Inputs/Outputs
$\overline{CE}$	Chip Enable Input
$\overline{OE}$	Output Enable Input
$\overline{WE}$	Write Enable Input
$\overline{LB}$	Lower-byte Control (I/O0-I/O7)
$\overline{UB}$	Upper-byte Control (I/O8-I/O15)
NC	No Connection
Vcc	Power
GND	Ground

Block Diagram



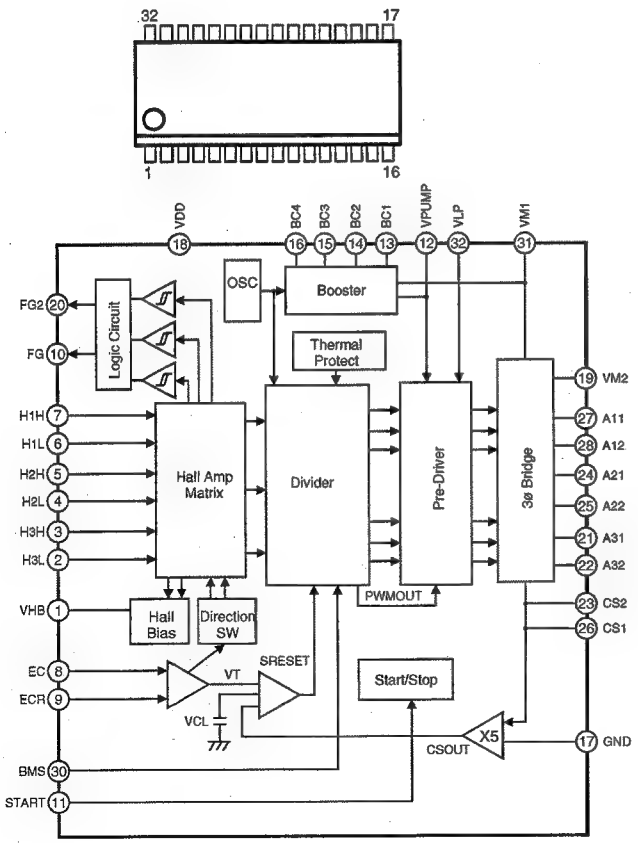
M11L16161SA (MA: IC505)



PIN DESCRIPTIONS

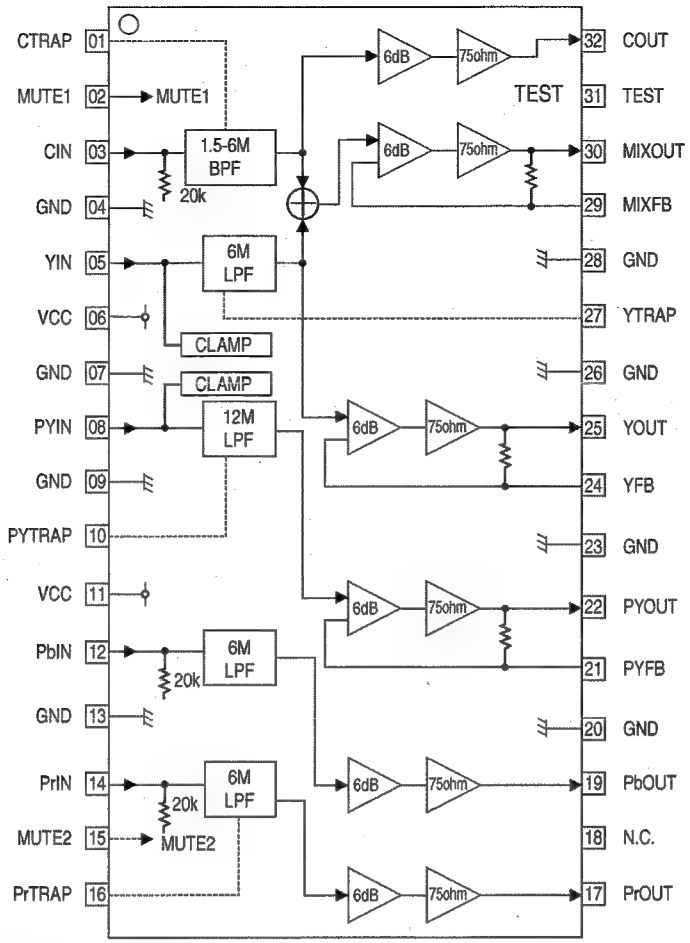
PIN NO.	PIN NAME	TYPE	DESCRIPTION
18~21,24~29	A0~A9	Input	Address Input Row Address:A0~A9 Column Address:A0~A9
15	$\overline{RAS}$	Input	Row Address Strobe
31	$\overline{CASH}$	Input	Column Address Strobe/Upper Byte Control
32	$\overline{CASL}$	Input	Column Address Strobe/Lower Byte Control
14	$\overline{WE}$	Input	Write Enable
30	$\overline{OE}$	Input	Output Enable
2~5,7~10, 35~38,40~43	I/O0~I/O15	Input/Output	Data Input/Output
1,6,22	Vcc	Supply	Power,(5V or 3.3V)
23,39,44	Vss	Ground	Ground
11,12,13,16,17, 33,34	NC	-	No Connect

AN8471SA (MA: IC501)



Pin No.	Pin Name	Function
1	VHB	Hall bias pin
2	H3L	Hall element 3 input (-)
3	H3H	Hall element 3 input (+)
4	H2L	Hall element 2 input (-)
5	H2H	Hall element 2 input (+)
6	H1L	Hall element 1 input (-)
7	H1H	Hall element 1 input (+)
8	EC	Torque command input pin
9	ECR	Torque command ref. input pin
10	FG1	FG signal lout put pin (0.C)
11	START	Start/Stop switching pin
12	VPUMP	Booster pin
13	BC1	Booster cap. connecting pin 1
14	BC2	Torque command input pin 2
15	BC3	Torque command input pin 3
16	BC4	Torque command input pin 4
17	GND	GND pin
18	V_{DD}	Power pin
19	VM2	Motor power pin 2
20	FG2	3x FG signal output pin (0.C)
21	A31	Drive output 3
22	A32	Drive output 3
23	CS2	Current detect pin 2
24	A21	Drive output 2
25	A22	Drive output 2
26	CS1	Current detect pin 1
27	A11	Drive output 1
28	A12	Drive output 1
29	NC	N.C.
30	BMS	Brake mode switching pin
31	VM1	Motor power pin 1
32	VLP	Pre-driver lower power

BH7862F (VI: IC602)

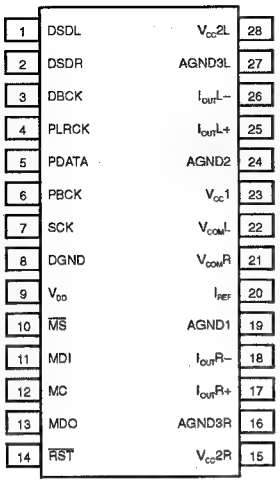


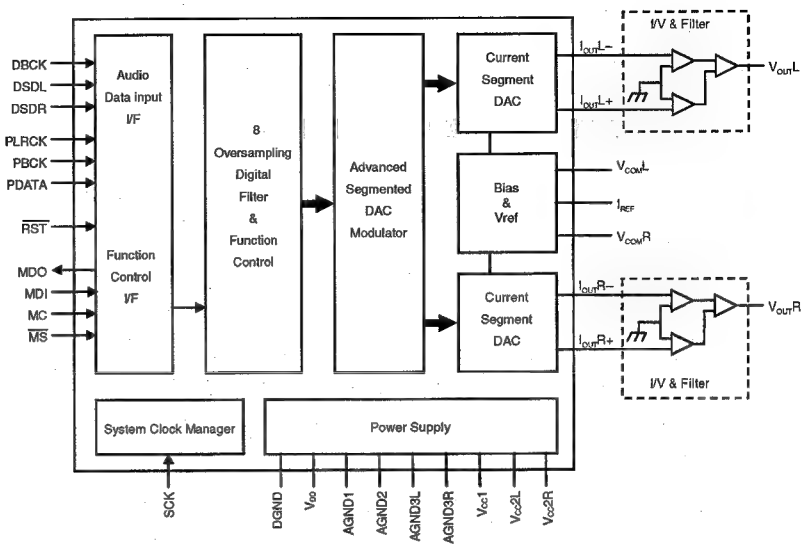
BH7862F Terminal Function

Pin No.	Port	Description
1	CTRAP	Pin for LC resonation
10	PYTRAP	
16	PrTRAP	
27	YTRAP	
2	MUTE1	Mute control pin, L: C, MIX, Y simultaneous mute
3	CIN	Signal input pin, chroma signal & color-difference signal
12	PbIN	
14	PrIN	
4, 7, 9, 13, 20, 23, 26, 28	GND	GND pin
5	YIN	Signal input pin, luminance signal
8	PYIN	
6	VCC	Power supply for C, MIX, Y
11		Power supply for PY, Pb, Pr
15	MUTE2	Mute control pin, L: PY, Pb, Pr simultaneous mute
17	PrOUT	Signal output pin, color-difference signal
19	PbOUT	
18	N.C.	—
21	PYFB	Signal output pin, luminance signal (progressive)
22	PYOUT	
24	YFB	Signal output pin, luminance signal (interlace)
25	YOUT	
29	MIXFB	Signal output pin, Y/C MIX signal
30	MIXOUT	
31	TEST	TEST pin
32	COUT	Signal output pin, chroma signal

DSD1790DBR (AD: IC504,505)

Block Diagram



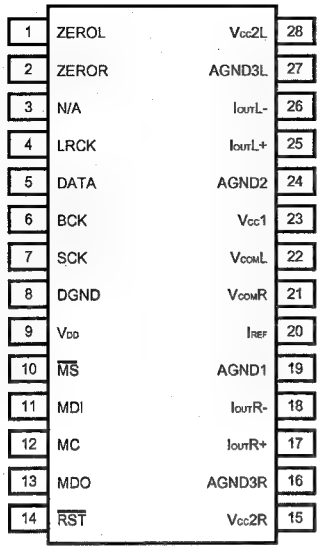


Terminal Function

TERMINAL NAME	TERMINAL PIN	I/O	DESCRIPTIONS
DSDL	1	I/O	L-channel audio data input for DSD and external DF modes‡ PCM mode zero flag for L-channel by ZERO output mode select
DSDR	2	I/O	R-channel audio data input for DSD and external DF modes‡ PCM mode zero flag for R-channel by ZERO output mode select
DBCK	3	I	Bit clock input for external DF and DSD modes†
PLRCK	4	I	Left and right clock (f_S) input for normal operation. WDCK clock input for external DF mode. Connected to GND for DSD mode†
PDATA	5	I	Serial audio data input for normal operation†
PBCK	6	I	Bit clock input. Connected GND for DSD mode†
SCK	7	I	System clock input†
DGND	8	-	Digital ground
V_{DD}	9	-	Digital power supply, +3.3 V
$\overline{MS}$	10	I/O	Chip select for mode control‡
MDI	11	I	Mode control data input†
MC	12	I	Mode control clock input†
MDO	13	I/O	Mode control read back data output‡
$\overline{RST}$	14	I	Reset†
$V_{CC}2R$	15	-	Analog power supply (R-channel DACFF), +5.0 V
AGND3R	16	-	Analog ground (R-channel DACFF)
$I_{OUT}R+$	17	O	R-channel analog current output +
$I_{OUT}R-$	18	O	R-channel analog current output –
AGND1	19	-	Analog ground (internal bias)
I_{REF}	20	-	Output current reference bias pin
$V_{COM}R$	21	-	R-channel Internal bias de-coupling pin
$V_{COM}L$	22	-	R-channel Internal bias de-coupling pin
$V_{CC}1$	23	-	Analog power supply, +5.0 V
AGND2	24	-	Analog ground (internal bias)
$I_{OUT}L+$	25	O	L-channel analog current output +
$I_{OUT}L-$	26	O	L-channel analog current output –
AGND3L	27	-	Analog ground (L-channel DACFF)
$V_{CC}2L$	28	-	Analog power supply (L-channel DACFF), +5.0 V

† Schmitt trigger input, 5 V tolerant.
‡ Schmitt trigger input and output, 3.3 V.

PCM1790DBR (AD: IC503)

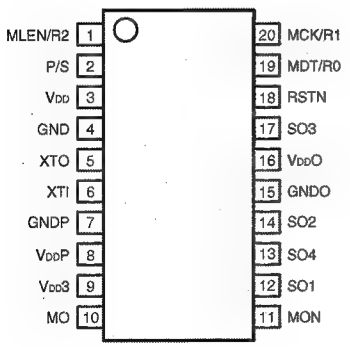


Terminal Function

TERMINAL NAME	TERMINAL PIN	I/O	DESCRIPTIONS
ZEROL	1	I/O	Zero flag for L-channel‡
ZEROR	2	I/O	Zero flag for R-channel‡
N/A	3	I	Need to fix GND.
LRCK	4	I	Left and right clock (f_S) input for normal operation†
DATA	5	I	Serial audio data input for normal operation†
BCK	6	I	Bit clock input†
SCK	7	I	System clock input†
DGND	8	-	Digital ground
VDD	9	-	Digital power supply, +3.3 V
$\overline{MS}$	10	I/O	Chip select for mode control‡
MDI	11	I	Mode control data input†
MC	12	I	Mode control clock input†
MDO	13	O	Mode control read back data output‡
$\overline{RST}$	14	I	Reset†
VCC2R	15	-	Analog power supply (R-channel DACFF), +5.0 V
AGND3R	16	-	Analog ground (R-channel DACFF)
IOUTR+	17	O	R-channel analog current output +
IOUTR-	18	O	R-channel analog current output -
AGND1	19	-	Analog ground (internal bias)
IREF	20	-	Output current reference bias pin
VCOMR	21	-	R-channel Internal bias de-coupling pin
VCOML	22	-	R-channel Internal bias de-coupling pin
VCC1	23	-	Analog power supply, +5.0 V
AGND2	24	-	Analog ground (internal bias)
IOUTL+	25	O	L-channel analog current output +
IOUTL-	26	O	L-channel analog current output -
AGND3L	27	-	Analog ground (L-channel DACFF)
VCC2L	28	-	Analog power supply (L-channel DACFF), +5.0 V

† Schmitt trigger input, 5 V tolerant.
‡ Schmitt trigger input and output, 5V tolerant input.

SM8701BM (MA: IC106)

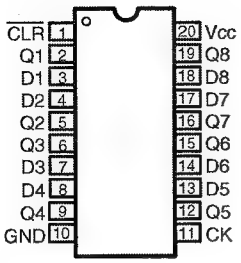


SM8701BM Terminal Function

Pin No.	Pin Name	I/O	Function
1	MLEN/R2	Ip[1]	Control signal input. In serial mode: latch enable signal In parallel mode: sampling rate select signal
2	P/S	Ip[1]	Mode select signal. LOW: serial mode, HIGH: parallel mode
3	VDD	—	5V supply (Digital block)
4	GND	—	Ground (Digital block)
5	XTO	O	Reference signal crystal oscillator element connection
6	XTI	I	Reference signal crystal oscillator element connection or external clock input
7	GNDP	—	Ground (PLL block)
8	VDDP	—	5V supply (PLL block)
9	VDD3	—	3.3V supply (output buffer)
10	MO	O	27 MHz fixed-frequency output
11	MON	O	27 MHz fixed-frequency output (inverted)
12	SO1	O	33.8688 MHz fixed-frequency output
13	SO4	O	768fs output
14	SO2	O	256fs output
15	GNDO	—	Ground (output buffer)
16	VDDO	—	3.3V supply (output buffer)
17	SO3	O	384fs output
18	RSTN	Ip[2]	LOW-level reset input
19	MDT/R0	Ip[1]	Control signal input. In serial mode: control data input signal In parallel mode: sampling frequency select signal
20	MCK/R1	Ip[1]	Control signal input. In serial mode: clock signal In parallel mode: sampling frequency select signal

Note: 1. Schmitt trigger input with pull-down resistor
2. Schmitt trigger input with pull-up resistor

SN74AHCT273PW (MA: IC107)

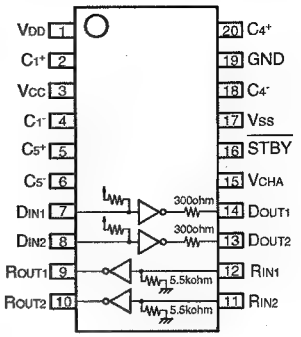


Truth Table

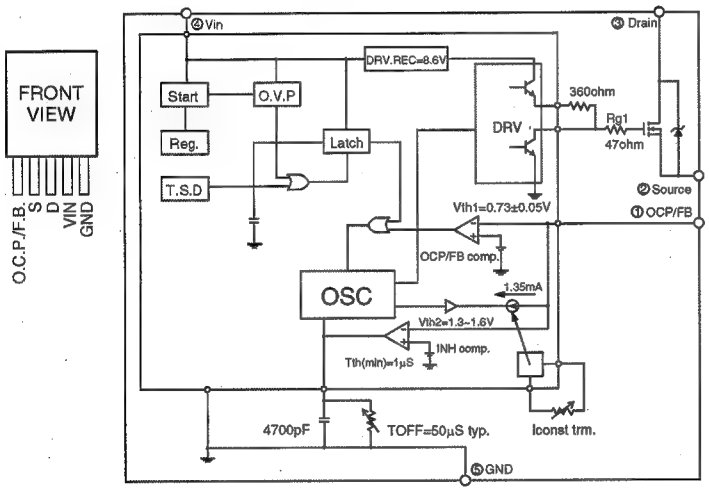
Input			Output	Function
$\overline{CLR}$	D	CK	Q	
L	X	X	L	Clear
H	L	↑	L	—
H	H	↑	H	—
H	X	↓	Qn	No change

X: Don't Care

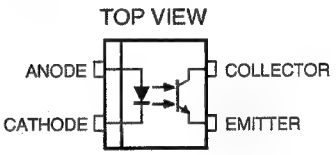
μPD4721GS (AD: IC307)



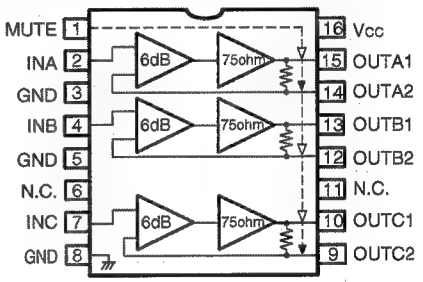
STR-F6652 (PO: IC901)



PC123 (PO: IC902,903)

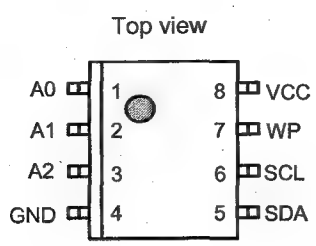


BA7660FS (SC: IC856) (Europe model only)



CY2302 (IE: IC110,505)

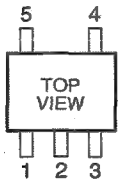
S-24CS08AFJ-TB (MA: IC116)

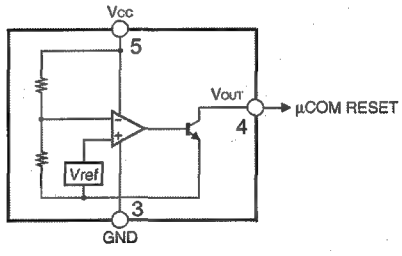


PIN DESCRIPTIONS

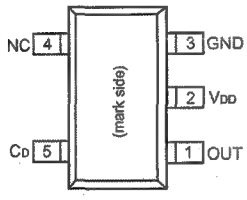
Pin No.	Pin Name	Description
1	A0	No Connected
2	A1	No Connected
3	A2	Address Input
4	GND	Ground
5	SDA	Serial Data Input/Output
6	SCL	Serial Clock Input
7	WP	Write Protected Input VCC Connected : Protected Effective GND Connected : Protected Invalid
8	VCC	Power

BD4730G (AD: IC401)

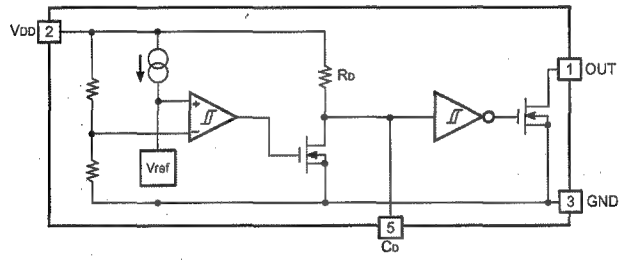




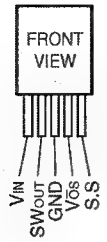
RN5VD15AA (IE: IC203)
RN5VD30AA (IE: IC206)

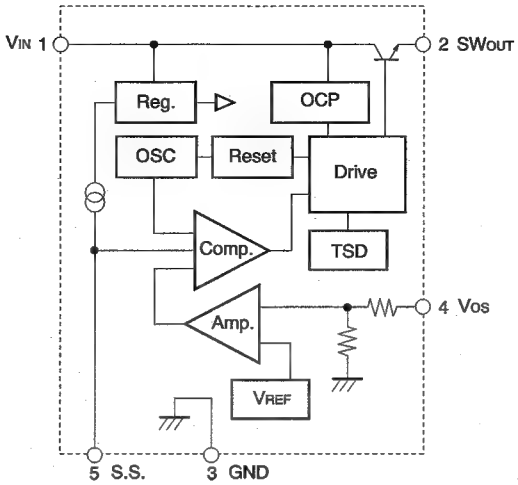


Block Diagram



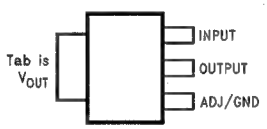
SI-8033S (PO: IC910)



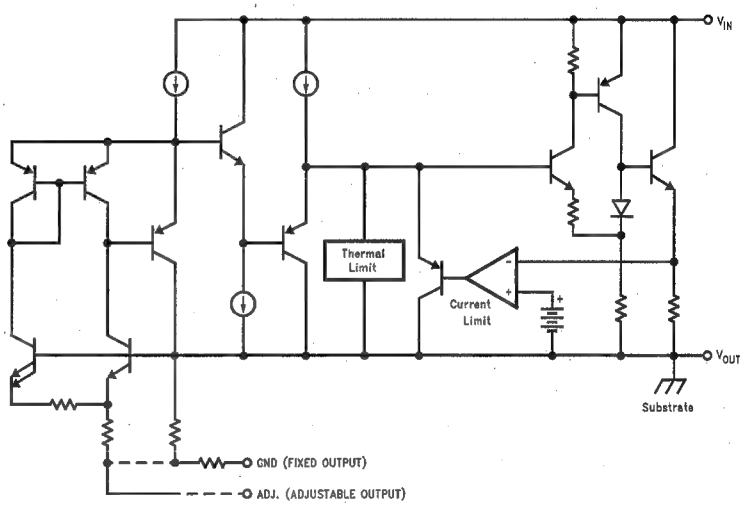


LM1117MPX-1.8 (IE: IC205)

Connection Diagrams



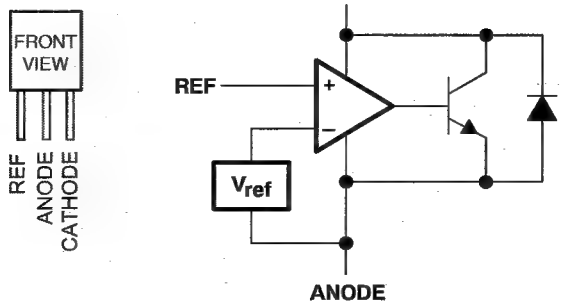
Block Diagram



Connection Diagrams

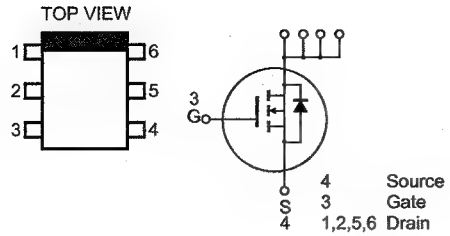
TL431ACLP (PO: IC904)

block diagram

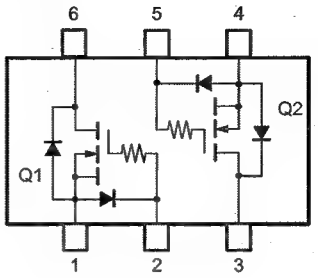


●TRANSISTORS

HAT2053M

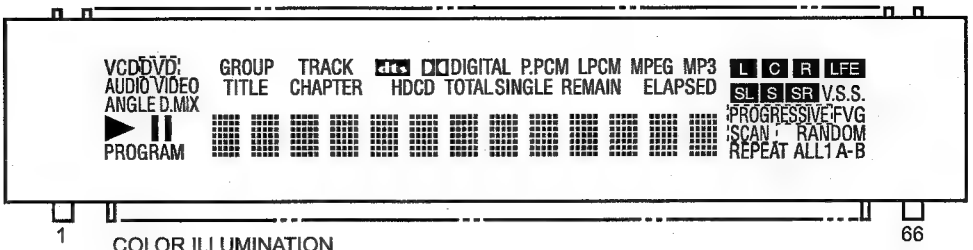


HN1K02FU



1. Source 1
2. Gate 1
3. Drain 2
4. Source 2
5. Gate 2
6. Drain 1

● FL TUBE HNV-15SS04T (MA: FL101)



COLOR ILLUMINATION

Reddish Orange ---- Above pattern [ ] part
Green ---------- Other

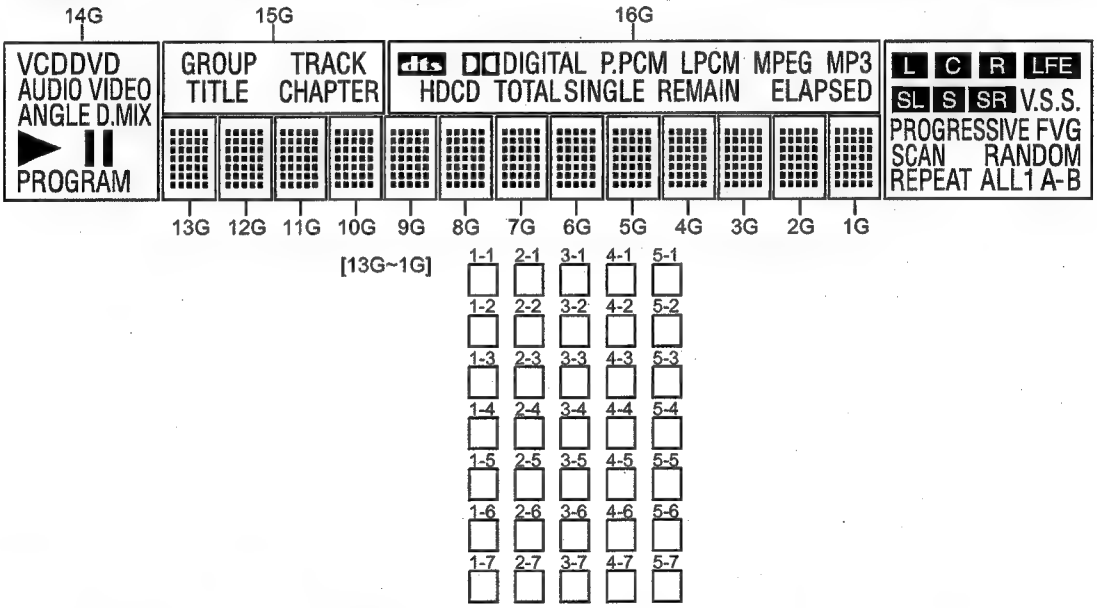
PIN CONNECTION

PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
CONNECTION	F-	NX	NP	NP	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15	P16	P17	P18	P19	P20	P21	P22	P23	P24	P25	P26	P27	P28	P29	P30	P31	P32	P33	P34	P35	NC	NC	NC	NC	NC	NC	1G	7G	6G	5G	4G	3G

PIN NO.	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66
CONNECTION	12G	11G	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G	NP	NP	NX	F+

NOTE 1) F-,F+ ---------- Filament
2) NP ---------- No pin
3) NX ---------- No extend pin
4) DL ---------- Datum line
5) 1G~17G ----- Grid
6) Visual Field -- Upper 22.6 min.
7) NC ---------- No connection
(NC pin should be electorically open on the PC board)

GRID ASSIGNMENT

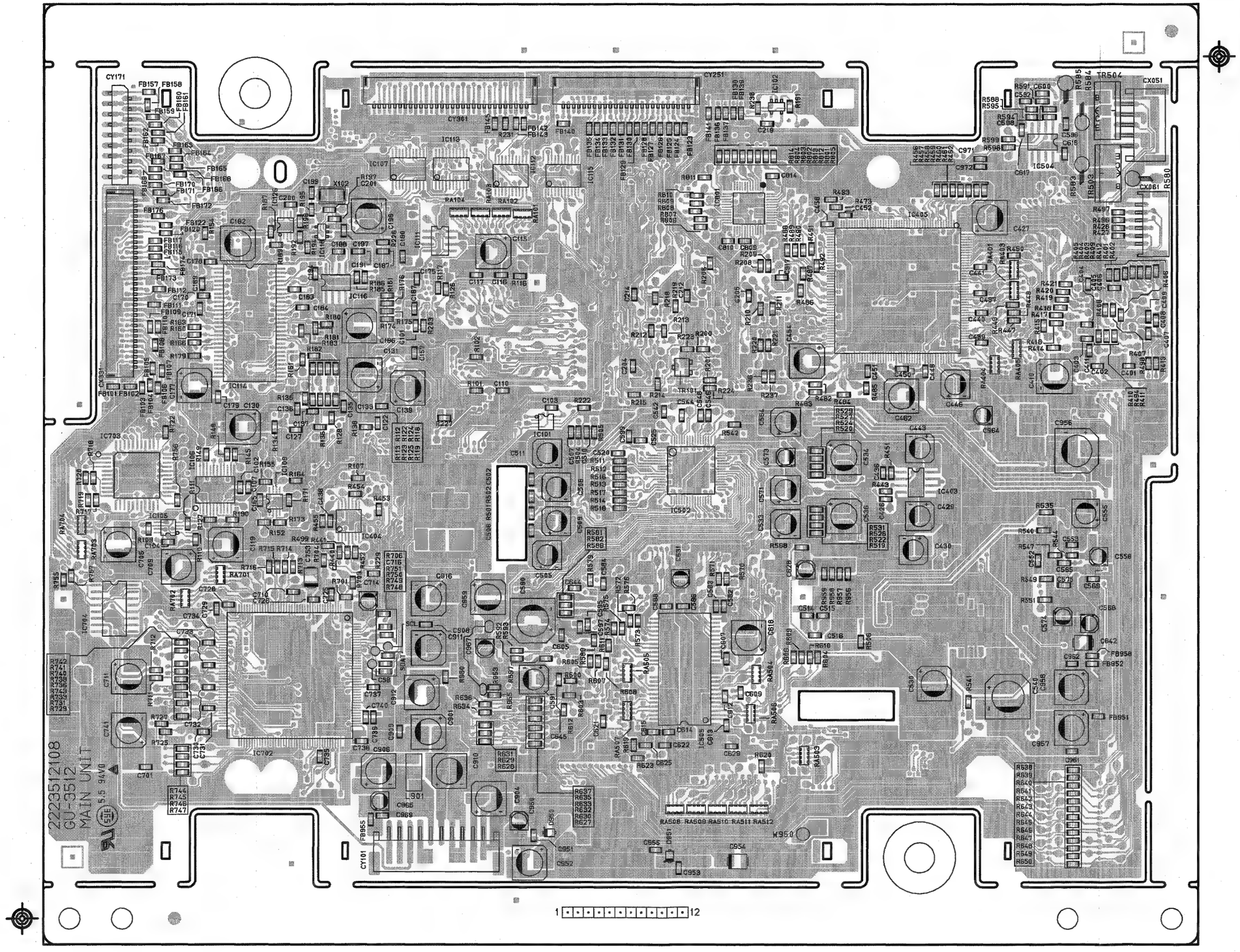


ANODE CONNECTION

	17G	16G	15G	14G	13G~1G		17G	16G	15G	14G	13G~1G
P1	SL	REMAIN	TITLE	PROGRAM	1-1	P19	G	—	—	—	4-4
P2	S	ELAPSED	CHAPTER	V	2-1	P20	—	—	—	—	5-4
P3	SR	SINGLE	TRACK	CD	3-1	P21	—	—	—	—	1-5
P4	L	HDCD	GROUP	DVD	4-1	P22	—	—	—	—	2-5
P5	C	TOTAL	—	AUDIO	5-1	P23	—	—	—	—	3-5
P6	R	dts	—	VIDEO	1-2	P24	—	—	—	—	4-5
P7	LFE	MP3	—	ANGLE	2-2	P25	—	—	—	—	5-5
P8	PROGRESSIVE SCAN	MPEG	—	▶	3-2	P26	—	—	—	—	1-6
						P27	—	—	—	—	2-6
P9	V.S.S.	LPCM	—	II	4-2	P28	—	—	—	—	3-6
P10	REPEAT	P.PCM	—	D.MIX	5-2	P29	—	—	—	—	4-6
P11	ALL	DIGITAL	—	—	1-3	P30	—	—	—	—	5-6
P12	1	—	—	—	2-3	P31	—	—	—	—	1-7
P13	A-	—	—	—	3-3	P32	—	—	—	—	2-7
P14	B	—	—	—	4-3	P33	—	—	—	—	3-7
P15	RANDOM	—	—	—	5-3	P34	—	—	—	—	4-7
P16	—	—	—	—	1-4	P35	—	—	—	—	5-7
P17	F	—	—	—	2-4						
P18	V	—	—	—	3-4						

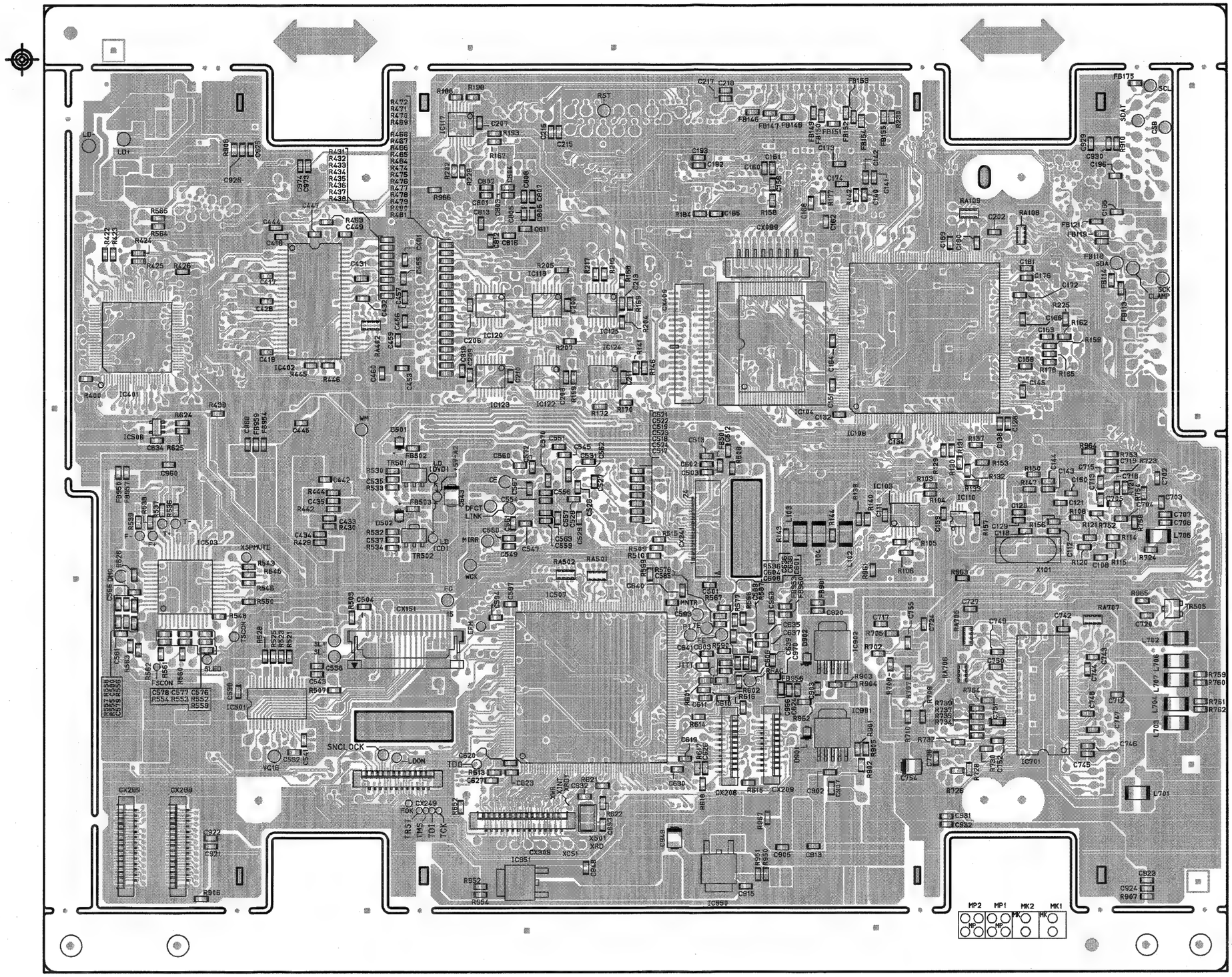
PRINTED WIRING BOADE

GU-3512 MAIN UNIT ASS'Y



COMPONENT SIDE

GU-3512 MAIN UNIT ASS'Y



FOIL SIDE

NOTE FOR PARTS LIST

- Part indicated with the mark "◉" are not always in stock and possibly to take a long period of time for supplying, or in some case supplying of part may be refused.
- When ordering of part, clearly indicate "1" and "I" (i) to avoid mis-supplying.
- Ordering part without stating its part number can not be supplied.
- Part indicated with the mark "★" is not illustrated in the exploded view.
- Not including Carbon Film Resister ±5%, 1/4W Type in the P.W.Board parts list. (Refer to the Schematic Diagram for those parts.)
- Not including Carbon Chip Resister 1/16W Type in the P.W.Board parts list. (Refer to the Schematic Diagram for those parts.)

WARNING:
Parts marked with this symbol ⚠ have critical characteristics.
Use ONLY replacement parts recommended by the manufacturer.

部品表について

1．◉印の部品は常時在庫していませんので供給に長時間を要することがあります。
場合によっては、供給をお断りすることがあります。
2．部品を発注する際は特に数字の“1”と英字の“I”との区別をはっきり記入してください。
3．部品番号を表示していない部品は供給できません。
4．⚠ 印の部品は安全上重要な部品です。交換するときは、安全性維持のため必ず指定の部品をご使用ください。
5．★印のついている部品は分解図中には記載していません。
6．カーボン抵抗器±5%、1/4W 型は記載していません。定数は回路図を参照願います。
7．カーボンチップ抵抗器 1/16W 型は記載していません。定数は回路図を参照願います。
8．部品表の抵抗器、コンデンサの品名記号の読み方は表を参照してください。

● Resistors

Ex.: RN (Type) 14K (Shape and performance) 2E (Power) 182 (Resistance) G (Allowable error) FR (Others)

RD : Carbon	2B : 1/8W	F : ±1%	P : Pulse-resistant type
RC : Composition	2E : 1/4W	G : ±2%	NL : Low noise type
RS : Metal oxide film	2H : 1/2W	J : ±5%	NB : Non-burning type
RW : Winding	3A : 1W	K : ±10%	FR : Fuse-resistor
RN : Metal film	3D : 2W	M : ±20%	F : Lead wire forming
RK : Metal mixture	3F : 3W		
	3H : 5W		

*** Resistance**

1 8 2 ⇒ 1800 ohm = 1.8 kohm
Indicates number of zeros after effective number.
2-digit effective number.
• Units: ohm

1 R 2 ⇒ 1.2 ohm
1-digit effective number.
2-digit effective number, decimal point indicated by R.
• Units: ohm

● Capacitors

Ex.: CE (Type) 04W (Shape and performance) 1H (Dielectric strength) 2R2 (Capacity) M (Allowable error) BP (Others)

CE : Aluminum foil electrolytic	0J : 6.3V	F : ±1%	HS : High stability type
CA : Aluminum solid electrolytic	1A : 10V	G : ±2%	BP : Non-polar type
CS : Tantalum electrolytic	1C : 16V	J : ±5%	HR : Ripple-resistant type
CQ : Film	1E : 25V	K : ±10%	DL : For change and discharge
CK : Ceramic	1V : 35V	M : ±20%	HF : For assuring high requency
CC : Ceramic	1H : 50V	Z : +80% −20%	U : UL part
CP : Oil	2A : 100V	P : +100% −0%	C : CSA part
CM : Mica	2B : 125V	C : ±0.25pF	W : UL-CSA type
CF : Metallized	2C : 160V	D : ±0.5pF	F : Lead wire forming
CH : Metallized	2D : 200V	= : Others	
	2E : 250V		
	2H : 500V		
	2J : 630V		

*** Capacity (electrolyte only)**

2 2 2 ⇒ 2200µF
Indicates number of zeros after effective number.
2-digit effective number.
• Units: µF.

2 R 2 ⇒ 2.2µF
1-digit effective number.
2-digit effective number, decimal point indicated by R.
• Units: µF.

*** Capacity (except electrolyte)**

2 2 2 ⇒ 2200pF=0.0022µF
(More than 2) Indicates number of zeros after effective number.
2-digit effective number.
• Units: pF.

2 2 1 ⇒ 220pF
(0 or 1) Indicates number of zeros after effective number.
2-digit effective number.
• Units: pF.

• When the dielectric strength is indicated in AC, "AC" is included after the dieelectric strength value.

●抵抗器

例) RN 種類 / 14K 形状特性 / 2E 電力 / 182 抵抗値 / G 許容差 / FR その他

RD ： カーボン	2B ： 1/8 W	F ： ±1%	P ： 耐パルス形
RC ： 固定体	2E ： 1/4 W	G ： ±2%	NL ： 低雑音形
RS ： 金属系皮膜	2H ： 1/2 W	J ： ±5%	NB ： 不燃形
RW ： 巻線	3A ： 1 W	K ： ±10%	FR ： ヒューズ抵抗
RN ： 金属皮膜	3D ： 2 W	M ： ±20%	F ： リード線成形
RK ： 金属混合体	3F ： 3 W		
	3H ： 5 W		

*** 抵抗値**

18 2 ⇒ 1800Ω=1.8kΩ
有効数字につづく 0 の数を表わす。
2 桁の有効数字を表わす。

1R 2 ⇒ 1.2Ω
1 桁の有効数字を表わす。
2 桁の有効数字で小数点は R で表わす。
：単位はΩ

●コンデンサ

例) CE 種類 / 04W 形状特性 / 1H 耐圧 / 2R2 容量 / M 許容差 / BP その他

CE ： アルミ箔電解	0J ： 6.3 V	F ： ±1%	HS ： 高安定形
CA ： アルミ固体電解	1A ： 10 V	G ： ±2%	BP ： 無極性形
CS ： タンタル電解	1C ： 16 V	J ： ±5%	HR ： 耐リップル形
CQ ： フィルム	1E ： 25 V	K ： ±10%	DL ： 充放電対策用
CK ： セラミック	1V ： 35 V	M ： ±20%	HF ： 高周波保証用
CC ： セラミック	1H ： 50 V	Z ： +80% −20%	U ： UL 部品
CP ： オイル	2A ： 100 V	P ： +100% − 0%	C ： CSA 部品
CM ： マイカ	2B ： 125 V	C ： ±0.25pF	W ： UL-CSA 部品
CF ： メタライズド	2C ： 160 V	D ： ±0.5pF	F ： リード線成形
CH ： メタライズド	2D ： 200 V	= ： その他	
	2E ： 250 V		
	2H ： 500 V		
	2J ： 630 V		

*** 容量値**

● 電解コンデンサの場合

22 2 ⇒ 2200µF
有効数字につづく 0 の数を表わす。
2 桁の有効数字を表わす。
：単位はµF

2R 2 ⇒ 2.2µF
1 桁の有効数字を表わす。
2 桁の有効数字で小数点は R で表わす。
：単位はµF

● 電解コンデンサ以外の場合

22 2 ⇒ 2200pF=0.0022µF
有効数字につづく 0 の数を表わす。
(0 の数が 2 以上の場合)
2 桁の有効数字を表わす。
：単位はpF

22 1 ⇒ 220pF
有効数字につづく 0 の数を表わす。
(0 の数が 0 または 1 の場合)
2 桁の有効数字を表わす。
：単位はpF

● 耐圧を交流で表示する場合は、耐圧表示の次に「AC」を表示します。

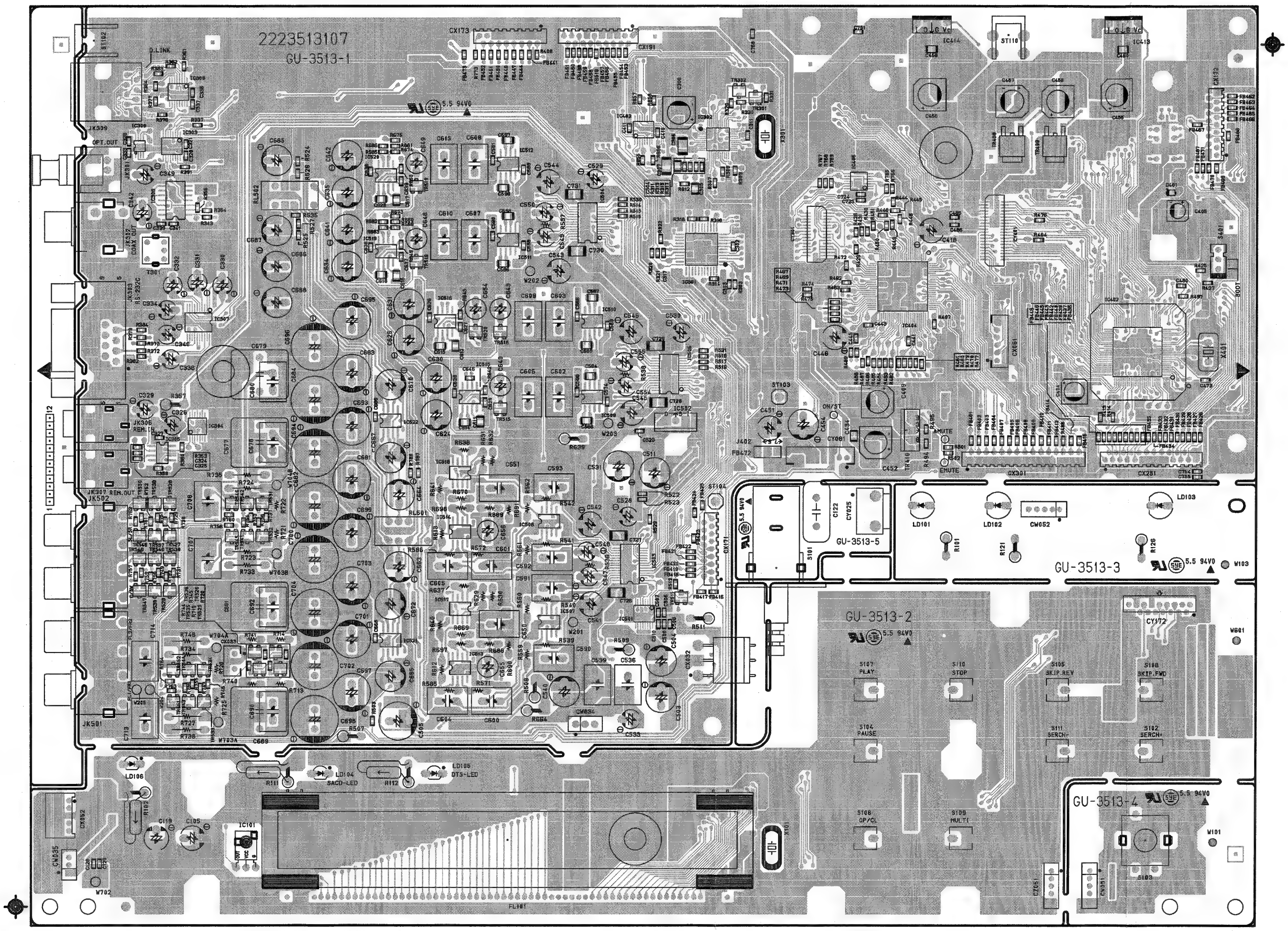
PARTS LIST OF P.W.B. UNIT ASS'Y

GU-3512 MAIN UNIT ASS'Y

Note: The symbols in the column "Remarks" indicate the following destinations.
E2 : Europe model
E3 : U.S.A. & Canada model
JP : Japan model

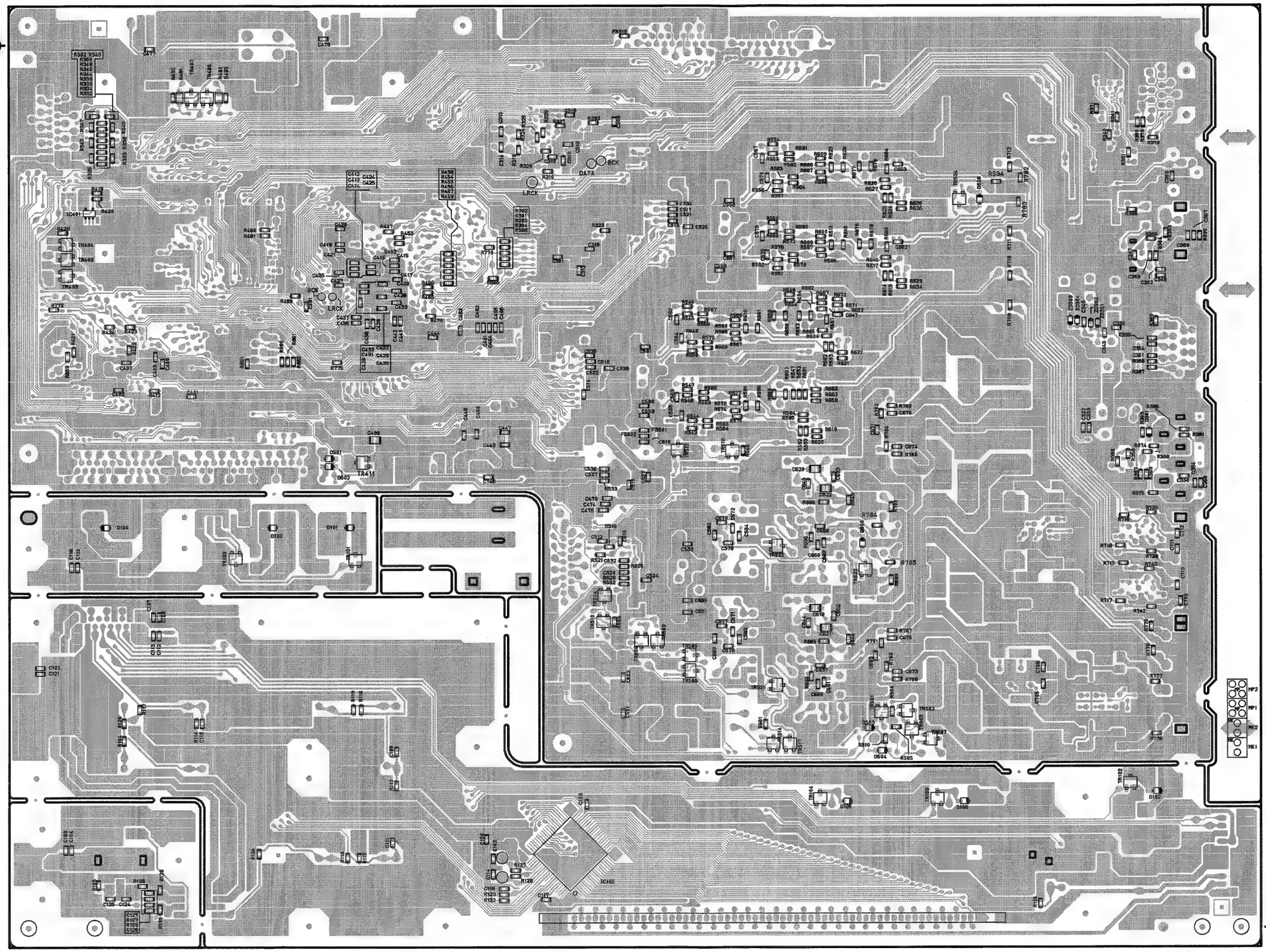
	Ref.No.	Part No.	Part Name	Remarks	New
SEMICONDUCTORS GROUP					
	IC101	262 3046 902	TC7WH157FU		
	IC104	GEN6334-1	IC104 FE/BE ROM SUB ASS'Y	MX29LV160BTC-90	
	IC105	262 3304 903	TC7WH14FU(TE12L)		*
	IC106	262 3052 909	SM8701BM		
	IC107	262 2801 902	SN74AHCT273PW-EL2		
	IC108	262 3252 000	ES6138F(SC)		*
	IC110	262 3046 902	TC7WH157FU		
	IC111	262 2391 904	TC7W32F(TE12L)		
	IC112,113	262 3242 900	SN74LV273APW-EL2		*
	IC114	262 3119 004	W986416DH-7		
	IC115	262 3242 900	SN74LV273APW-EL2		*
	IC116	262 3251 904	S-24CS08AFJ-TB		*
	IC117	262 3269 909	SN74LVC125APW-EL2		
	IC119,120	262 2669 908	SN74LV157APW		
	IC122	262 2517 908	SN74LV08APW-EL2		
	IC123-125	262 2669 908	SN74LV157APW		
	IC401	262 3282 009	EPM3128ATC100-10		
	IC402	262 2875 006	16M SDRAM(TSOP)-7/8		
	IC403	262 3195 905	AD8062-SO8		
	IC404	262 2515 900	SN74LV04APW-EL2		
	IC405	262 3217 003	CXD2753R		
	IC501	263 1109 909	AN8471SA		
	IC502	262 3219 001	CXD1881AR		
	IC503	262 3221 002	FAN8042		
	IC504	263 0615 902	BA15218F-DXE2		
	IC505	262 3210 000	M11L16161SA-45T		
	IC507	262 3218 002	CXD1885Q		
	IC508	262 1782 909	TC7S08FTE85L		
	IC701	262 3303 001	K4S643232#-TC60		*
	IC702	262 3240 009	PM0033A		*
	IC801	262 3291 003	SM5819A		
	IC901	263 1110 901	PQ070XZ01ZP		
	IC950	262 2977 917	BA25BC0FP-E2		*
	IC951	262 2977 904	BA18BC0FP-E2		
	TR101	269 0082 902	DTC114EKT96		
	TR501,502	272 0160 901	2SB1132T100Q		
	TR503	274 0154 007	2SD1902(R,S)		
	TR504	272 0110 003	2SB1266(R,S)		
	D501,502	276 0717 903	1SS355 TE-17		
	D901,902	276 0717 903	1SS355 TE-17		
	D950,951	276 0717 903	1SS355 TE-17		
RESISTORS GROUP					
	R580	244 2051 945	RS14B3A010JNBST(S)		
	R583,584	244 2052 960	RS14B3A221JNBST(S)		
	R585	244 2050 904	RS14B3A220JNBST(S)		
	RA101-104	247 9002 912	MNR14=682JE0AB		
	RA108,109	247 9002 909	MNR14=330JE0AB		
	RA401-405	247 9003 908	MNR14=220JE0AB		
	RA501-507	247 9007 904	MNR14=101JE0		
	RA508-512	247 9007 917	MNR14=103JE0		
	RA701,702	247 9002 909	MNR14=330JE0AB		

GU-3513 AUDIO/DISPLAY UNIT ASS'Y

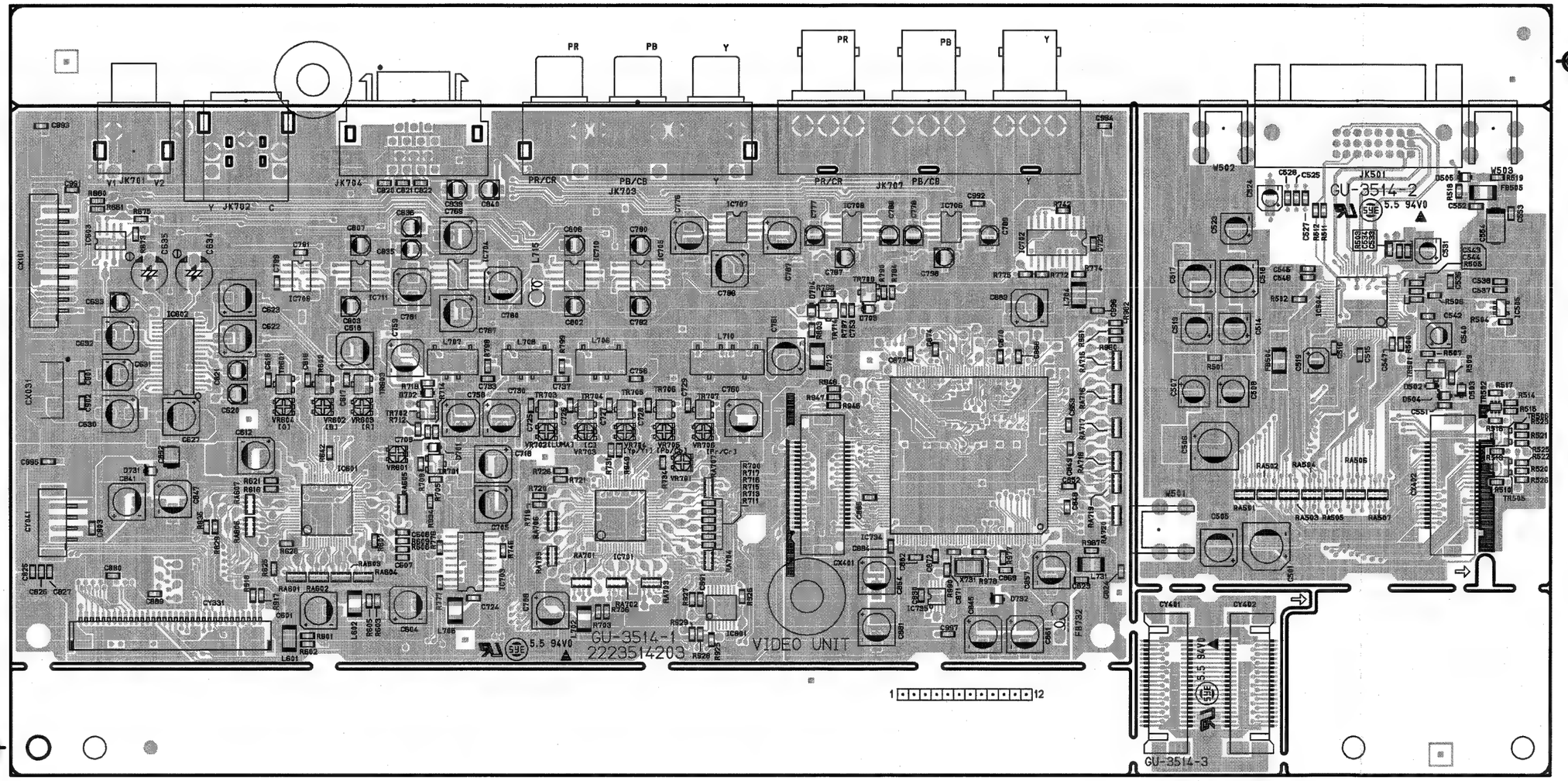


COMPONENT SIDE

GU-3513 AUDIO/DISPLAY UNIT ASS'Y

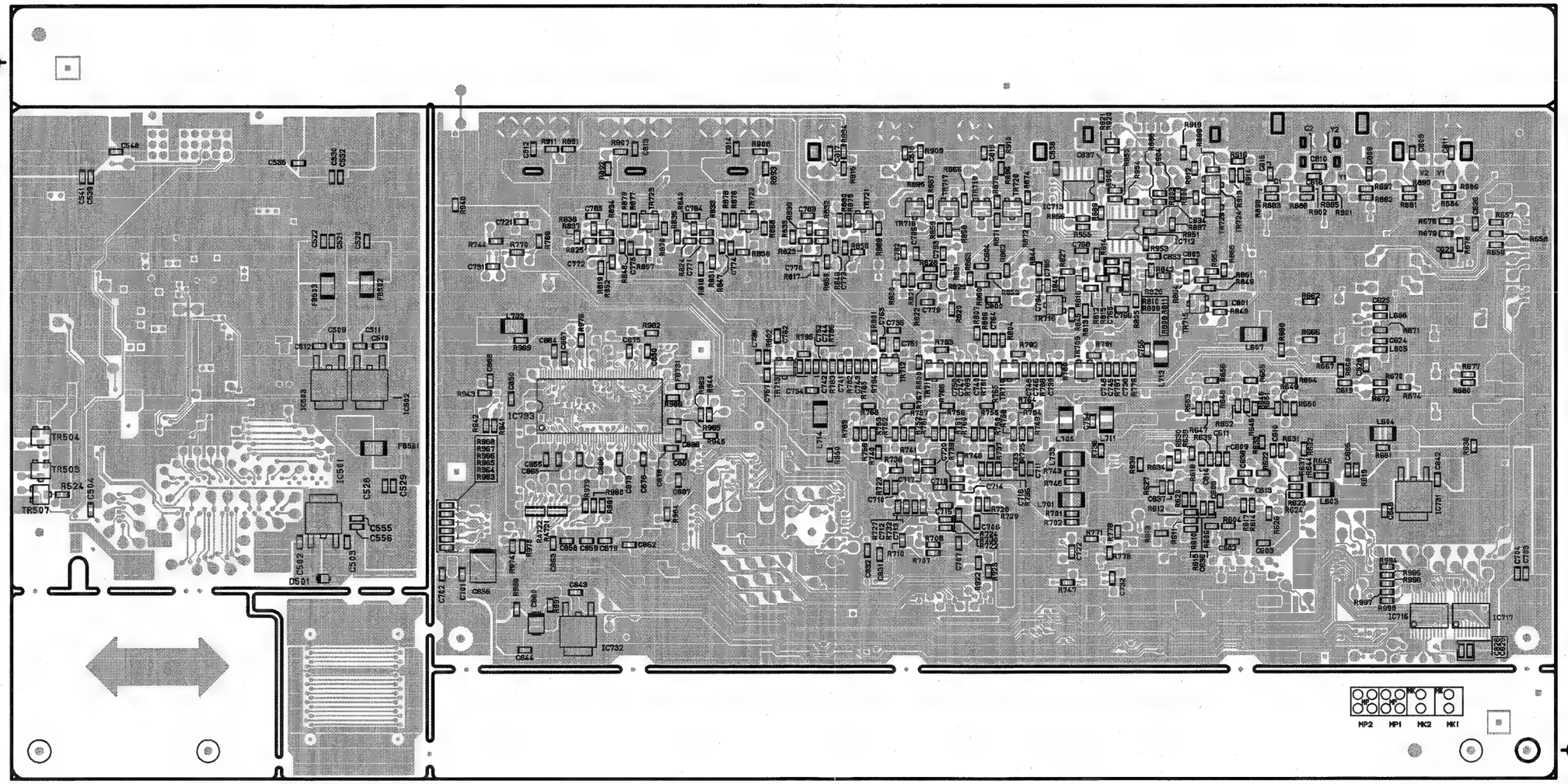


GU-3514 VIDEO UNIT ASS'Y



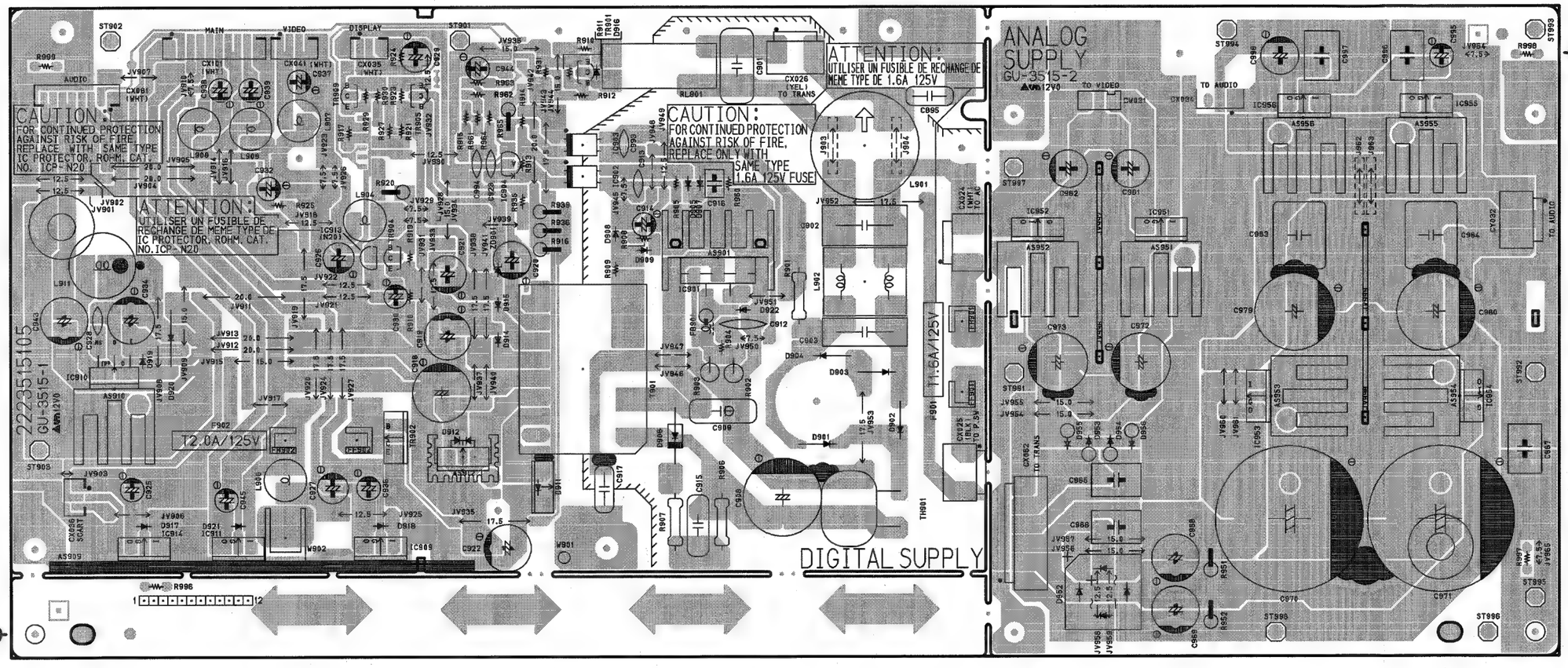
COMPONENT SIDE

GU-3514 VIDEO UNIT ASS'Y



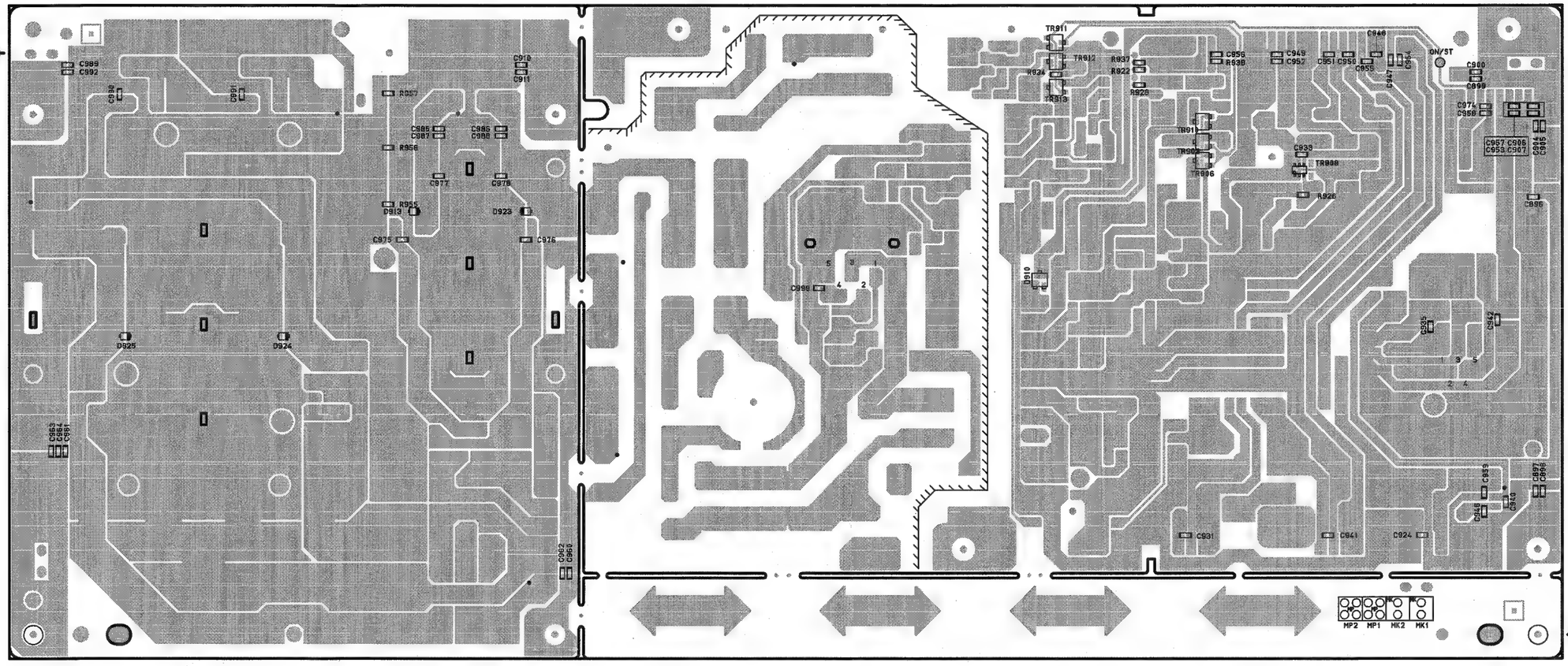
FOIL SIDE

GU-3515 POWER UNIT ASS'Y



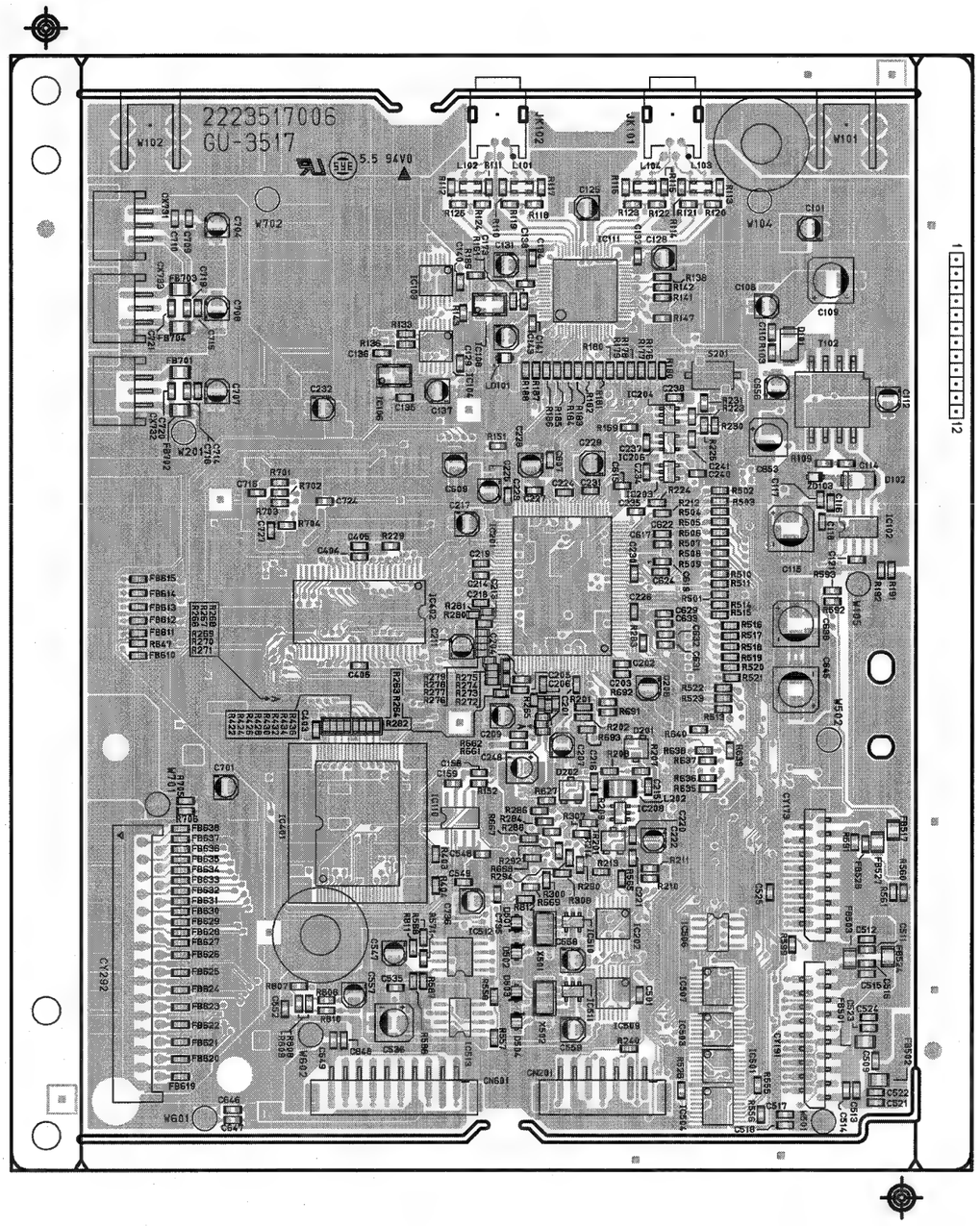
COMPONENT SIDE

GU-3515 POWER UNIT ASS'Y

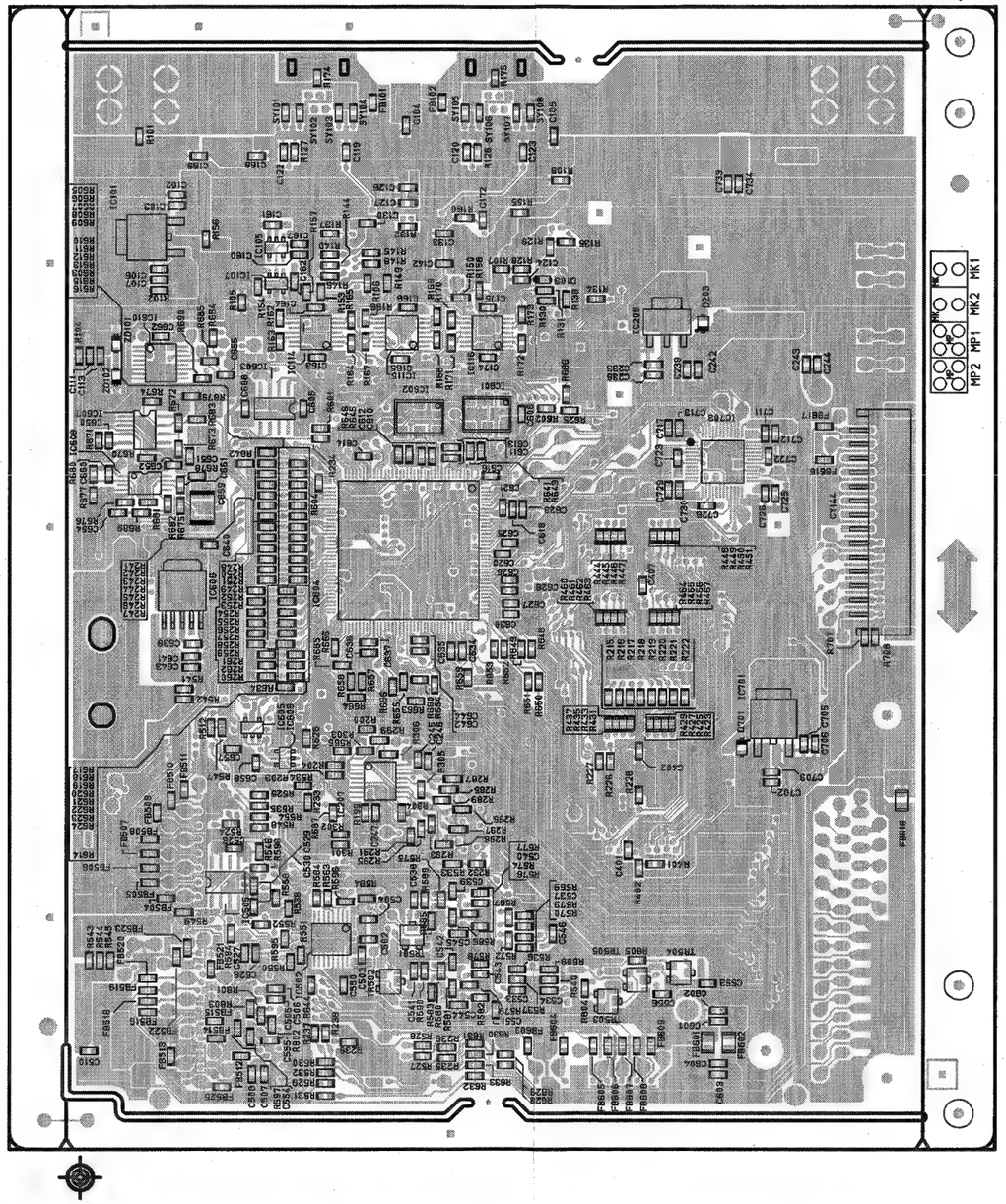


FOIL SIDE

GU-3517 IEEE1394 UNIT ASS'Y

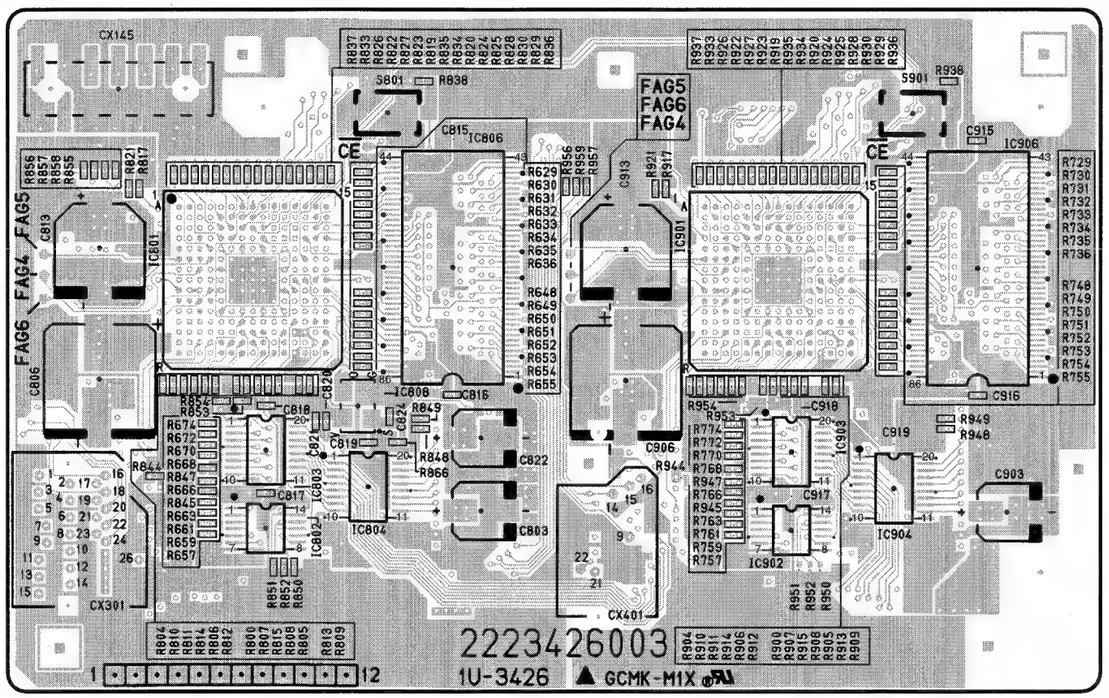


COMPONENT SIDE

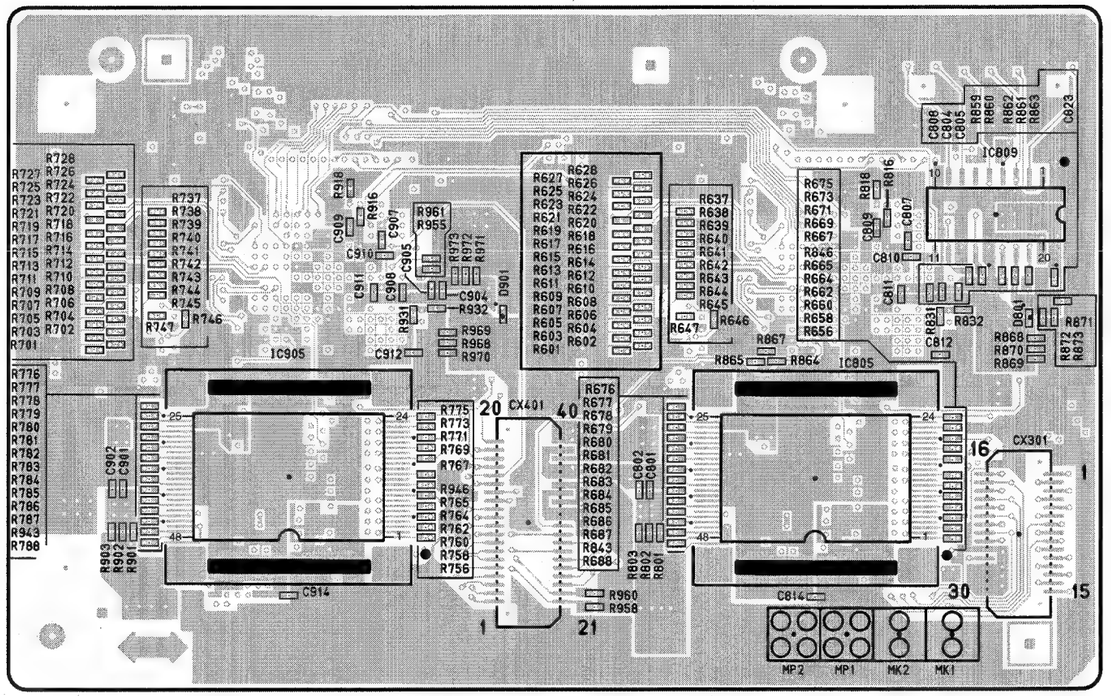


FOIL SIDE

1U-3426 DSP P.W.B. UNIT ASS'Y

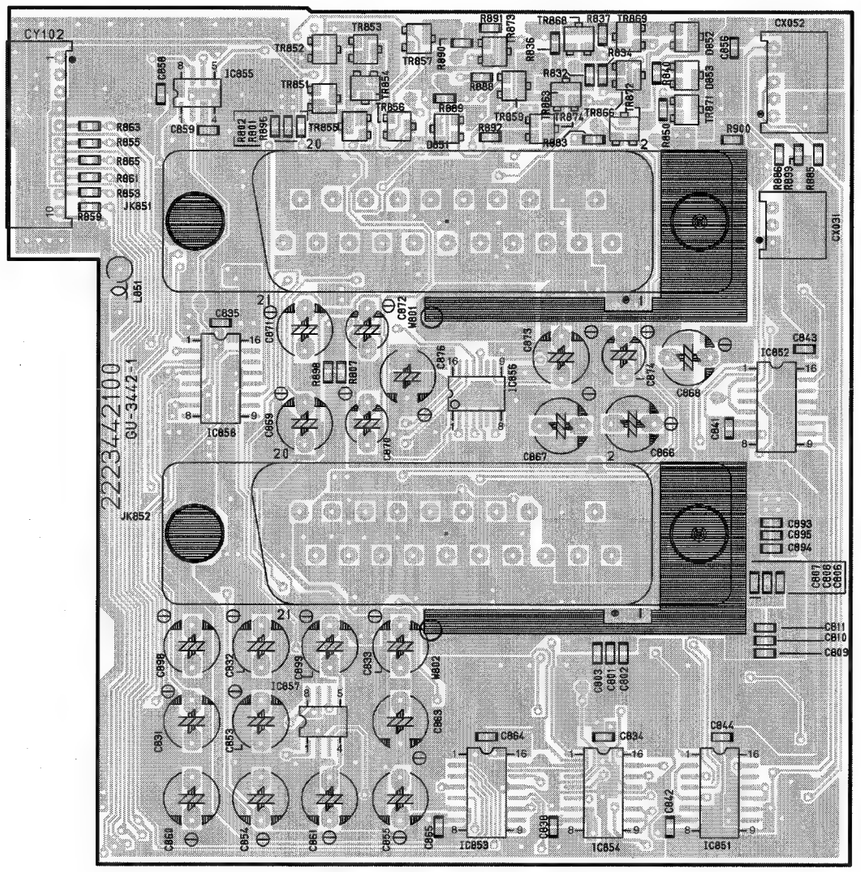


COMPONENT SIDE

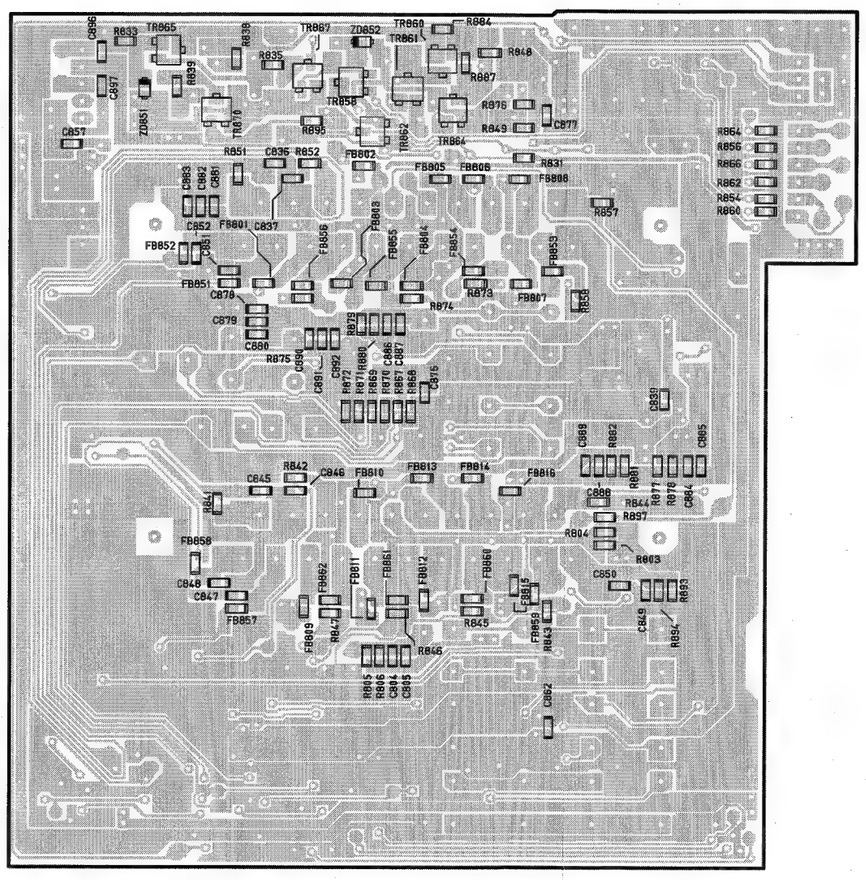


FOIL SIDE

GU-3442 SCART P.W.B. UNIT ASS'y (Europe model only)



COMPONENT SIDE



FOIL SIDE

	Ref.No.	Part No.	Part Name	Remarks	New
	RA705-707	247 9007 917	MNR14=103JE0		
CAPACITORS GROUP					
	C101	257 0512 903	CK73F1E104ZT		
	C102	257 0511 904	CK73F1H103ZT		
	C103	257 0512 903	CK73F1E104ZT		
	C104	257 0509 929	CK73B1H102KT		
	C107	257 0511 904	CK73F1H103ZT		
	C108	257 0512 903	CK73F1E104ZT		
	C110	257 0511 904	CK73F1H103ZT		
	C111	257 0512 903	CK73F1E104ZT		
	C112	257 0503 912	CC73CH1H9R0DT		
	C115	254 4464 906	CE67C0J101MT		
	C116	257 0509 929	CK73B1H102KT		
	C117	257 0512 903	CK73F1E104ZT		
	C118	257 0503 912	CC73CH1H9R0DT		
	C119	254 4464 906	CE67C0J101MT		
	C120,121	257 0512 903	CK73F1E104ZT		
	C122	257 0511 904	CK73F1H103ZT		
	C127	257 0504 982	CC73CH1H470JT		
	C129	257 0509 929	CK73B1H102KT		
	C130,131	254 4464 906	CE67C0J101MT		
	C132	257 0512 903	CK73F1E104ZT		
	C133	257 0511 904	CK73F1H103ZT		
	C134-138	257 0512 903	CK73F1E104ZT		
	C139	254 4464 906	CE67C0J101MT		
	C140	257 0511 904	CK73F1H103ZT		
	C141	257 0512 903	CK73F1E104ZT		
	C142	257 0509 929	CK73B1H102KT		
	C143	257 0512 903	CK73F1E104ZT		
	C144	257 0509 929	CK73B1H102KT		
	C145	257 0512 903	CK73F1E104ZT		
	C150	257 0511 904	CK73F1H103ZT		
	C151	257 0512 903	CK73F1E104ZT		
	C156	257 0511 904	CK73F1H103ZT		
	C157-160	257 0512 903	CK73F1E104ZT		
	C161	257 0509 929	CK73B1H102KT		
	C162-167	257 0512 903	CK73F1E104ZT		
	C168	257 0511 904	CK73F1H103ZT		
	C169-173	257 0512 903	CK73F1E104ZT		
	C174	257 0509 929	CK73B1H102KT		
	C175,176	257 0512 903	CK73F1E104ZT		
	C177	254 4464 906	CE67C0J101MT		
	C178-181	257 0512 903	CK73F1E104ZT		
	C182	254 4464 906	CE67C0J101MT		
	C183,184	257 0512 903	CK73F1E104ZT		
	C185	257 0511 904	CK73F1H103ZT		
	C186	254 4464 906	CE67C0J101MT		
	C187-192	257 0512 903	CK73F1E104ZT		
	C193	257 0509 929	CK73B1H102KT		
	C194-197	257 0512 903	CK73F1E104ZT		
	C199	257 0503 941	CC73CH1H120JT		
	C200	257 0512 903	CK73F1E104ZT		
	C201	257 0503 967	CC73CH1H150JT		
	C202	257 0509 929	CK73B1H102KT		
	C203	257 0501 901	CK73B1H103KT (1608)		
	C204	257 0509 929	CK73B1H102KT		
	C205	257 0501 901	CK73B1H103KT (1608)		
	C206	257 0509 929	CK73B1H102KT		
	C207,208	257 0512 903	CK73F1E104ZT		

	Ref.No.	Part No.	Part Name	Remarks	New
	C209	257 0501 901	CK73B1H103KT (1608)		
	C210	257 0509 929	CK73B1H102KT		
	C211	257 0501 901	CK73B1H103KT (1608)		
	C212	257 0509 929	CK73B1H102KT		
	C213	257 0501 901	CK73B1H103KT (1608)		
	C214	257 0509 929	CK73B1H102KT		
	C215	257 0512 903	CK73F1E104ZT		
	C216	257 0511 904	CK73F1H103ZT		
	C217	257 0512 903	CK73F1E104ZT		
	C218	257 0511 904	CK73F1H103ZT		
	C401-407	257 0512 903	CK73F1E104ZT		
	C409	257 0512 903	CK73F1E104ZT		
	C410	254 4464 906	CE67C0J101MT		
	C411	257 0512 903	CK73F1E104ZT		
	C416-418	257 0512 903	CK73F1E104ZT		
	C426	257 0501 901	CK73B1H103KT (1608)		
	C427	254 4464 906	CE67C0J101MT		
	C428	257 0512 903	CK73F1E104ZT		
	C429,430	254 4465 905	CE67C1C220MT		
	C431-434	257 0512 903	CK73F1E104ZT		
	C435,436	257 0502 942	CC73CH1H2R0CT		
	C437-442	257 0512 903	CK73F1E104ZT		
	C443	254 4465 905	CE67C1C220MT		
	C444,445	257 0512 903	CK73F1E104ZT		
	C446	254 4465 905	CE67C1C220MT		
	C448-453	257 0512 903	CK73F1E104ZT		
	C454	254 4464 906	CE67C0J101MT		
	C455-461	257 0512 903	CK73F1E104ZT		
	C462	254 4464 906	CE67C0J101MT		
	C501	257 0511 904	CK73F1H103ZT		
	C503	257 0511 904	CK73F1H103ZT		
	C505	254 4465 905	CE67C1C220MT		
	C511	254 4465 905	CE67C1C220MT		
	C512,513	257 0511 904	CK73F1H103ZT		
	C517-520	257 0509 990	CK73B1H222KT		
	C521-524	257 0504 908	CC73CH1H220JT		
	C525,526	257 0510 934	CK73B1H472KT		
	C527	257 0507 976	CC73CH1H331JT		
	C528,529	257 0511 904	CK73F1H103ZT		
	C530	254 4464 906	CE67C0J101MT		
	C531,532	257 0516 954	CK73B1E104KT		
	C533	254 4465 905	CE67C1C220MT		
	C534	254 4465 918	CE67C1C470MT		
	C535	257 0509 929	CK73B1H102KT		
	C536	254 4465 918	CE67C1C470MT		
	C537	257 0509 929	CK73B1H102KT		
	C538	257 0516 954	CK73B1E104KT		
	C539	257 0511 904	CK73F1H103ZT		
	C540	257 4010 906	CE67C1C101MT		
	C541,542	257 0516 954	CK73B1E104KT		
	C543	257 0509 929	CK73B1H102KT		
	C544-546	257 0516 954	CK73B1E104KT		
	C547	257 0501 901	CK73B1H103KT (1608)		
	C548	257 0516 954	CK73B1E104KT		
	C549	257 0501 901	CK73B1H103KT (1608)		
	C550	257 0506 993	CC73CH1H151JT		
	C551	257 0509 929	CK73B1H102KT		
	C552,553	257 0511 904	CK73F1H103ZT		
	C554	257 0520 911	CK73B1A224KT		
	C555	254 4465 905	CE67C1C220MT		
	C556,557	257 0520 911	CK73B1A224KT		

	Ref.No.	Part No.	Part Name	Remarks	New
	C558	254 4464 951	CE67C0J220MT(MV-B)		
	C559	257 0520 911	CK73B1A224KT		
	C560	257 0516 941	CK73B1E473KT		
	C561	257 0501 901	CK73B1H103KT (1608)		
	C562,563	257 0516 954	CK73B1E104KT		
	C564	254 4465 905	CE67C1C220MT		
	C565-567	257 0511 904	CK73F1H103ZT		
	C568	254 4464 951	CE67C0J220MT(MV-B)		
	C569,570	257 0511 904	CK73F1H103ZT		
	C571	254 4465 905	CE67C1C220MT		
	C572	257 0511 904	CK73F1H103ZT		
	C573,574	254 4464 951	CE67C0J220MT(MV-B)		
	C575	257 0511 904	CK73F1H103ZT		
	C576	257 0509 929	CK73B1H102KT		
	C577,578	257 0506 951	CC73CH1H101JT		
	C579-581	257 0510 950	CK73B1H682KT		
	C582	257 0511 904	CK73F1H103ZT		
	C583	257 0508 917	CC73CH1H471JT		
	C584	257 0516 941	CK73B1E473KT		
	C585	257 0507 976	CC73CH1H331JT		
	C586-588	257 0511 904	CK73F1H103ZT		
	C589	257 0507 976	CC73CH1H331JT		
	C590	254 4464 919	CE67C0J471MT		
	C591	254 4465 905	CE67C1C220MT		
	C593-595	257 0511 904	CK73F1H103ZT		
	C596	257 0516 954	CK73B1E104KT		
	C597	257 0511 904	CK73F1H103ZT		
	C601	257 0508 917	CC73CH1H471JT		
	C603	257 0508 917	CC73CH1H471JT		
	C604	257 0516 954	CK73B1E104KT		
	C605-607	257 0511 904	CK73F1H103ZT		
	C608	257 0506 951	CC73CH1H101JT		
	C609	257 0511 904	CK73F1H103ZT		
	C610,611	257 0516 909	CK73B1E223KT		
	C612	257 0508 917	CC73CH1H471JT		
	C613	257 0511 904	CK73F1H103ZT		
	C614	257 0508 917	CC73CH1H471JT		
	C615	257 0511 904	CK73F1H103ZT		
	C616,617	257 0516 954	CK73B1E104KT		
	C618	254 4464 906	CE67C0J101MT		
	C619-625	257 0511 904	CK73F1H103ZT		
	C627	257 0516 954	CK73B1E104KT		
	C628	254 4464 951	CE67C0J220MT(MV-B)		
	C629,630	257 0516 954	CK73B1E104KT		
	C631	254 4464 951	CE67C0J220MT(MV-B)		
	C634-636	257 0516 954	CK73B1E104KT		
	C637,638	257 0520 908	CK73B1A154KT		
	C640,641	257 0512 903	CK73F1E104ZT		
	C644	257 0512 903	CK73F1E104ZT		
	C701-704	257 0512 903	CK73F1E104ZT		
	C705	257 0511 904	CK73F1H103ZT		
	C706	254 4464 906	CE67C0J101MT		
	C707	257 0512 903	CK73F1E104ZT		
	C708	257 0509 929	CK73B1H102KT		
	C709	254 4464 906	CE67C0J101MT		
	C710	257 0512 903	CK73F1E104ZT		
	C711	254 4464 906	CE67C0J101MT		
	C712,713	257 0512 903	CK73F1E104ZT		
	C714	254 4572 908	CE67C1C100MT(MV-B)		
	C715,716	257 0512 903	CK73F1E104ZT		
	C717	257 0501 901	CK73B1H103KT (1608)		

	Ref.No.	Part No.	Part Name	Remarks	New
	C718,719	257 0512 903	CK73F1E104ZT		
	C724-740	257 0512 903	CK73F1E104ZT		
	C741	254 4464 906	CE67C0J101MT		
	C742-752	257 0512 903	CK73F1E104ZT		
	C753,754	257 2010 937	CS77B1A220MT		
	C755	257 0512 903	CK73F1E104ZT		
	C801	257 0501 901	CK73B1H103KT (1608)		
	C802	257 0509 929	CK73B1H102KT		
	C803	257 0501 901	CK73B1H103KT (1608)		
	C804,805	257 0509 929	CK73B1H102KT		
	C806	257 0501 901	CK73B1H103KT (1608)		
	C807	257 0509 929	CK73B1H102KT		
	C808	257 0501 901	CK73B1H103KT (1608)		
	C809	257 0516 954	CK73B1E104KT		
	C810	257 0509 929	CK73B1H102KT		
	C811,812	257 0501 901	CK73B1H103KT (1608)		
	C813	257 0509 929	CK73B1H102KT		
	C816	257 0509 929	CK73B1H102KT		
	C901	254 4464 906	CE67C0J101MT		
	C902,903	257 0512 903	CK73F1E104ZT		
	C904	254 4464 906	CE67C0J101MT		
	C905	257 0512 903	CK73F1E104ZT		
	C906	254 4464 906	CE67C0J101MT		
	C907-909	257 0512 903	CK73F1E104ZT		
	C910-912	254 4464 906	CE67C0J101MT		
	C913	257 0512 903	CK73F1E104ZT		
	C916	254 4464 906	CE67C0J101MT		
	C917	257 0512 903	CK73F1E104ZT		
	C918	257 0511 904	CK73F1H103ZT		
	C920,921	257 0512 903	CK73F1E104ZT		
	C922	257 0511 904	CK73F1H103ZT		
	C923	257 0512 903	CK73F1E104ZT		
	C924	257 0511 904	CK73F1H103ZT		
	C925	257 0512 903	CK73F1E104ZT		
	C926	257 0511 904	CK73F1H103ZT		
	C929	257 0512 903	CK73F1E104ZT		
	C930	257 0511 904	CK73F1H103ZT		
	C931	257 0512 903	CK73F1E104ZT		
	C932	257 0511 904	CK73F1H103ZT		
	C949	257 2010 937	CS77B1A220MT		
	C950	254 4464 951	CE67C0J220MT(MV-B)		
	C951	257 0512 903	CK73F1E104ZT		
	C952	254 4464 906	CE67C0J101MT		
	C953	257 0512 903	CK73F1E104ZT		
	C954	257 2010 937	CS77B1A220MT		
	C955	257 0511 904	CK73F1H103ZT		
	C956	257 4010 906	CE67C1C101MT		
	C957-959	254 4464 906	CE67C0J101MT		
	C960-963	257 0512 903	CK73F1E104ZT		
	C964,965	254 4464 951	CE67C0J220MT(MV-B)		
	C966	257 0512 903	CK73F1E104ZT		
	C967	254 4464 951	CE67C0J220MT(MV-B)		
	C968-971	257 0512 903	CK73F1E104ZT		
	C972	257 0511 904	CK73F1H103ZT		
	C973	257 0512 903	CK73F1E104ZT		
	C974	257 0511 904	CK73F1H103ZT		
OTHER PARTS GROUP					
	CX051	205 0863 952	5P PH CON.BASE(L)		
	CX061	205 0792 968	6P ZH-ZRCON.BASE(L)T		

	Ref.No.	Part No.	Part Name	Remarks	New
	CX151	205 1224 901	15P FFC BASE(P=1.0)L		
	CX241	205 1264 903	24P FFC BASE(P=0.5)L		*
	CX331	205 1174 970	33P FFC BASE(FMNSMT)		
	CY101	205 1172 901	10P PH CON.BASE(L)		*
	CY171	205 1170 903	17P FFC BASE(FMNBMTT		
	CY251	205 1174 983	25P FFC BASE(FMNSMT)		*
	CY301	205 1174 941	30P FFC BASE(FMNSMT)		
	FB101-143	235 0130 903	CHIP EMIFIL(11A121)		
	FB145-155	235 0130 903	CHIP EMIFIL(11A121)		
	FB157-176	235 0130 903	CHIP EMIFIL(11A121)		
	FB501-503	235 0130 903	CHIP EMIFIL(11A121)		
	FB901	235 0136 907	FBMJ1608HS280NT		
	FB950-960	235 0136 907	FBMJ1608HS280NT		
	L701,702	235 0125 905	INDUCTOR(FLC32C220K)		
	L704,705	235 0125 905	INDUCTOR(FLC32C220K)		
	L707	235 0125 905	INDUCTOR(FLC32C220K)		
	L901	235 0048 901	EMI FILTER (103)TP		
	X101	399 0619 906	X'TAL(27MHZ)		
		414 0963 003	EARTH PLATE		

Note: The symbols in the column "Remarks" indicate the following destinations.
E2 : Europe model
E3 : U.S.A. & Canada model
JP : Japan model

GU-3513 AUDIO/DISPLAY UNIT ASS'Y

	Ref.No.	Part No.	Part Name	Remarks	New
SEMICONDUCTORS GROUP					
	IC101	499 0306 001	GP1UE271XK		*
	IC102	262 3235 001	ML9207-03GP		*
	IC301	262 3057 001	AK4101VQ		
	IC302	262 3066 102	LC89057W-VF4-E(AC)		
	IC303	262 2669 908	SN74LV157APW		
	IC304	262 2515 900	SN74LV04APW-EL2		
	IC305	262 2580 906	CXA1511M		
	IC306	262 1421 901	TC74HCT04AF(TAPE1)		
	IC307	262 2114 903	UPD4721GS-GJG		
	IC308	262 3120 909	SN65LVDS31PW		
	IC309	262 3125 904	SN65LVDS179DGK-EL2		
	IC401	262 3082 924	BD4730G-TR		*
	IC402	262 3246 029	M30620FCNGP-XXXX		*
	IC403	262 2669 908	SN74LV157APW		
	IC404	262 3243 103	EPM3128ATC100-10-***		*
	IC405	262 2515 900	SN74LV04APW-EL2		
	IC501	262 2669 908	SN74LV157APW		
	IC503	262 3244 908	PCM1790DBR		*
	IC504,505	262 3229 907	DSD1790DBR		
	IC507,508	263 0896 909	NJM2068MD-TE1	for E3,E2	
	IC507,508	263 1074 908	OP275GSR	for JP	
	IC509,510	263 0896 909	NJM2068MD-TE1		
	IC511,512	263 0896 909	NJM2068MD-TE1	for E3,E2	
	IC511,512	263 1074 908	OP275GSR	for JP	
	IC513,514	263 0896 909	NJM2068MD-TE1	for E3,E2	
	IC513,514	263 0615 902	BA15218F-DXE2	for JP	
	IC515-518	263 0896 909	NJM2068MD-TE1		
	IC519,520	263 0896 909	NJM2068MD-TE1	for E3,E2	
	IC519,520	263 0615 902	BA15218F-DXE2	for JP	
	IC521,522	263 0896 909	NJM2068MD-TE1	for E3,E2	
	IC521,522	263 1074 908	OP275GSR	for JP	
	TR101-105	269 0082 902	DTC114EKT96		
	TR403	269 0082 902	DTC114EKT97		
	TR404	269 0083 901	DTA114EKT96		
	TR405-407	269 0082 902	DTC114EKT97		
	TR408,409	272 0161 900	2SB1412TL(PQR)		
	TR410	272 0083 004	2SB1185(E/F)		
	TR411	269 0082 902	DTC114EKT97		
	TR501	273 0426 907	2SC2412KLNT146		
	TR502	269 0083 901	DTA114EKT96		
	TR503	269 0119 901	DTA124EKT96(TAPE)		
	TR504	269 0082 902	DTC114EKT97		
	TR505,506	269 0119 901	DTA124EKT96(TAPE)		
	TR507-509	269 0082 902	DTC114EKT97		
	TR510	269 0119 901	DTA124EKT96(TAPE)		
	TR511	269 0082 902	DTC114EKT97		
	TR512	269 0119 901	DTA124EKT96(TAPE)		
	TR513	269 0082 902	DTC114EKT97		
	TR514	269 0119 901	DTA124EKT96(TAPE)		
	TR515,516	273 0460 905	KTC2875B-RTK		
	TR517	269 0082 902	DTC114EKT97		
	TR518-522	273 0460 905	KTC2875B-RTK		
	TR523,524	269 0082 902	DTC114EKT97		
	TR525-546	273 0460 905	KTC2875B-RTK		
	TR551,552	273 0460 905	KTC2875B-RTK		

	Ref.No.	Part No.	Part Name	Remarks	New
	D101-106	276 0717 903	1SS355 TE-17		
	D401	276 0717 903	1SS355 TE-17		
	D501-504	276 0717 903	1SS355 TE-17		
	D506	276 0717 903	1SS355 TE-17		
	D508	276 0717 903	1SS355 TE-17		
	LD101,102	393 9576 903	SELU1E10CXM-002		
	LD103	393 9504 904	SEL1210S(TP7)		
	LD104-106	393 9623 908	SEL2810A(TP7)		
RESISTORS GROUP					
	R101	244 2051 929	RS14B3A821JNBST(S)		
	R102	244 2052 960	RS14B3A221JNBST(S)		
	R111,112	244 2052 960	RS14B3A221JNBST(S)		
	R121	244 2051 929	RS14B3A821JNBST(S)		
	R126	244 2052 960	RS14B3A221JNBST(S)		
	R357	244 2052 928	RS14B3A470JNBST(S)		
	R507	244 2051 974	RS14B3A102JNBST(S)		
	R508,509	244 2051 929	RS14B3A821JNBST(S)		
	R511	244 2051 929	RS14B3A821JNBST(S)		
	R639	244 2051 929	RS14B3A821JNBST(S)		
	R664	244 2051 929	RS14B3A821JNBST(S)		
	R723,724	241 2420 946	RD14B2E151JT(PSNB)		
	R727	241 2420 946	RD14B2E151JT(PSNB)		
	R733-735	241 2420 946	RD14B2E151JT(PSNB)		
	R738	241 2420 946	RD14B2E151JT(PSNB)		
	R748	241 2420 946	RD14B2E151JT(PSNB)		
CAPACITORS GROUP					
	C102	257 0503 983	CC73CH1H180JT		
	C103	257 0511 904	CK73F1H103ZT		
	C104	257 0509 929	CK73B1H102KT		
	C105	254 4299 964	CE04W1C470MT(SRE)		
	C106,107	257 0512 903	CK73F1E104ZT		
	C108	257 0509 929	CK73B1H102KT		
	C112	257 0512 903	CK73F1E104ZT		
	C113	257 0509 929	CK73B1H102KT		
	C114	257 0503 983	CC73CH1H180JT		
	C115	257 0509 929	CK73B1H102KT		
	C116	257 0511 904	CK73F1H103ZT		
	C117	257 0512 903	CK73F1E104ZT		
	C118	257 0511 904	CK73F1H103ZT		
	C119	254 4196 999	CE04W1H220MT (SRA)		
	C120	257 0509 929	CK73B1H102KT		
	C121	257 0511 904	CK73F1H103ZT		
	C122	253 8022 707	CK45F2EAC103MC		
	C123	257 0512 903	CK73F1E104ZT		
	C124-127	257 0501 901	CK73B1H103KT (1608)		
	C128	257 0509 929	CK73B1H102KT		
	C129	257 0501 901	CK73B1H103KT (1608)		
	C301	257 0511 904	CK73F1H103ZT		
	C302,303	257 0509 929	CK73B1H102KT		
	C304	257 3011 919	CF73=1H102JT(ECHUB5)		
	C305	257 3014 929	CF73=1C472JT(ECHUB5)		
	C306	257 3015 944	CF73=1C683JT(ECHUB5)		
	C307	257 3006 911	CF73=1C104JT(ECHUB5)		
	C308	254 4603 958	CE67W1E101MT(P.CAP)		
	C309-313	257 0512 903	CK73F1E104ZT		
	C314,315	257 0502 955	CC73CH1H3R0CT		

	Ref.No.	Part No.	Part Name	Remarks	New
	C316	257 0511 904	CK73F1H103ZT		
	C317	257 0509 929	CK73B1H102KT		
	C318,319	257 0512 903	CK73F1E104ZT		
	C320	257 0501 901	CK73B1H103KT (1608)		
	C321	257 0509 929	CK73B1H102KT		
	C322	257 0516 954	CK73B1E104KT		
	C323	257 0509 929	CK73B1H102KT		
	C324	257 0506 951	CC73CH1H101JT		
	C325	257 0501 901	CK73B1H103KT (1608)		
	C326	254 4538 939	CE04W1C470MT SMG/RE3		
	C327	257 0501 901	CK73B1H103KT (1608)		
	C329	254 4524 943	CE04W1H010MT SMG/RE3		
	C330-332	254 4524 901	CE04W1H0R1MT SMG/RE3		
	C333	257 0516 909	CK73B1E223KT		
	C334	254 4533 921	CE04W0J101MT SMG/RE3		
	C335	257 0512 903	CK73F1E104ZT		
	C337	257 0516 909	CK73B1E223KT		
	C338	254 4524 901	CE04W1H0R1MT SMG/RE3		
	C339	257 0509 929	CK73B1H102KT		
	C340	254 4524 901	CE04W1H0R1MT SMG/RE3		
	C341	257 0512 903	CK73F1E104ZT		
	C342	254 4525 900	CE04W1H330MT SMG/RE3		
	C348	257 0512 903	CK73F1E104ZT		
	C349	254 4524 985	CE04W1H100MT SMG/RE3		
	C350	257 0501 901	CK73B1H103KT (1608)		
	C351	257 0506 951	CC73CH1H101JT		
	C352	257 0509 929	CK73B1H102KT		
	C353	257 0501 901	CK73B1H103KT (1608)		
	C354	257 0506 951	CC73CH1H101JT		
	C356	257 0505 907	CC73CH1H560JT		
	C364	257 0509 929	CK73B1H102KT		
	C367	257 0512 903	CK73F1E104ZT		
	C368	257 0501 901	CK73B1H103KT (1608)		
	C369	257 0509 929	CK73B1H102KT		
	C401	257 0509 929	CK73B1H102KT		
	C402,403	257 0512 903	CK73F1E104ZT		
	C404	254 4464 906	CE67C0J101MT		
	C405	254 4524 972	CE04W1H4R7MT SMG/RE3		
	C406	257 3006 924	CF73=1C103JT(ECHUB5)		
	C407	257 0512 903	CK73F1E104ZT		
	C408	257 0509 929	CK73B1H102KT		
	C409	254 4601 918	CE67W0J471MT(P.CAP)		
	C410	257 0512 903	CK73F1E104ZT		
	C411	257 0501 901	CK73B1H103KT (1608)		
	C412	257 0511 904	CK73F1H103ZT		
	C413-416	257 0512 903	CK73F1E104ZT		
	C417	257 0511 904	CK73F1H103ZT		
	C418	254 4300 963	CE04W0J101MT(SRE)		
	C419	257 0511 904	CK73F1H103ZT		
	C420-423	257 0512 903	CK73F1E104ZT		
	C424	257 0511 904	CK73F1H103ZT		
	C425-428	257 0512 903	CK73F1E104ZT		
	C429	257 0511 904	CK73F1H103ZT		
	C430,431	257 0512 903	CK73F1E104ZT		
	C432	257 0511 904	CK73F1H103ZT		
	C433	257 0512 903	CK73F1E104ZT		
	C434	257 3006 924	CF73=1C103JT(ECHUB5)		
	C435	257 0512 903	CK73F1E104ZT		
	C436	257 0511 904	CK73F1H103ZT		
	C437,438	257 0512 903	CK73F1E104ZT		
	C439	257 0511 904	CK73F1H103ZT		

	Ref.No.	Part No.	Part Name	Remarks	New
	C440-445	257 0512 903	CK73F1E104ZT		
	C446	254 4300 963	CE04W0J101MT(SRE)		
	C447,448	257 0512 903	CK73F1E104ZT		
	C449,450	257 0509 929	CK73B1H102KT		
	C451	254 4368 934	CE04W1E101MT(ASF)		
	C452	254 4601 918	CE67W0J471MT(P.CAP)		
	C454	254 4368 947	CE04W1E221MT(ASF)		
	C455-458	254 4601 918	CE67W0J471MT(P.CAP)		
	C459,460	257 3006 924	CF73=1C103JT(ECHUB5)		
	C461-463	257 0511 904	CK73F1H103ZT		
	C464-466	257 0509 929	CK73B1H102KT		
	C473	257 0512 903	CK73F1E104ZT		
	C474	257 0509 929	CK73B1H102KT		
	C475	257 0511 904	CK73F1H103ZT		
	C476-478	257 0512 903	CK73F1E104ZT		
	C480,481	257 0509 929	CK73B1H102KT		
	C485	257 0509 929	CK73B1H102KT		
	C486	257 0511 904	CK73F1H103ZT		
	C501,502	257 0512 903	CK73F1E104ZT		
	C503,504	254 4313 950	CE04W1H101MT(ASF)		
	C505	254 4319 750	CE04W1E471MC(ASF)		
	C506	257 0501 901	CK73B1H103KT (1608)		
	C507	257 0509 929	CK73B1H102KT		
	C508	257 0516 954	CK73B1E104KT		
	C509	257 0501 901	CK73B1H103KT (1608)		
	C510	257 0509 929	CK73B1H102KT		
	C511	254 4313 950	CE04W1H101MT(ASF)		
	C512-514	257 0506 951	CC73CH1H101JT		
	C515	257 0501 901	CK73B1H103KT (1608)		
	C516-518	257 0506 951	CC73CH1H101JT		
	C520-522	257 0506 951	CC73CH1H101JT		
	C524-526	257 0516 954	CK73B1E104KT		
	C527	257 0501 901	CK73B1H103KT (1608)		
	C528-530	254 4313 918	CE04W1H100MT(ASF)		
	C531	254 4313 950	CE04W1H101MT(ASF)		
	C532	257 0501 901	CK73B1H103KT (1608)		
	C533	254 4313 918	CE04W1H100MT(ASF)		
	C534,535	257 0501 901	CK73B1H103KT (1608)		
	C536	255 4256 955	CQ93P2A103JT(NH2)		
	C539	255 4256 955	CQ93P2A103JT(NH2)		
	C540	254 4313 950	CE04W1H101MT(ASF)		
	C541-546	254 4313 934	CE04W1H470MT(ASF)		
	C547-550	254 4313 918	CE04W1H100MT(ASF)		
	C551-553	257 0516 954	CK73B1E104KT		
	C554,555	254 4313 918	CE04W1H100MT(ASF)		
	C556-561	257 0516 954	CK73B1E104KT		
	C566	257 0512 903	CK73F1E104ZT		
	C568,569	257 0512 903	CK73F1E104ZT		
	C574	257 0512 903	CK73F1E104ZT		
	C580,581	257 0512 903	CK73F1E104ZT		
	C586	257 3011 951	CF73=1H272JT(ECHUB5)		
	C587	257 3011 948	CF73=1H222JT(ECHUB5)		
	C588,589	257 0512 903	CK73F1E104ZT		
	C590-593	255 4254 973	CQ93P2A182JT(NH2)		
	C594	257 3011 951	CF73=1H272JT(ECHUB5)		
	C595	257 3011 948	CF73=1H222JT(ECHUB5)		
	C596-599	257 3011 951	CF73=1H272JT(ECHUB5)		
	C600,601	255 4253 974	CQ93P2A681JT(NH2)		
	C602,603	255 4256 913	CQ93P2A682JT(NH2)		
	C604,605	255 4253 974	CQ93P2A681JT(NH2)		
	C606	255 4257 912	CQ93P2A183JT(NH2)		

	Ref.No.	Part No.	Part Name	Remarks	New
	C607,608	255 4256 913	CQ93P2A682JT(NH2)		
	C609,610	255 4257 912	CQ93P2A183JT(NH2)		
	C611,612	257 3011 948	CF73=1H222JT(ECHUB5)		
	C613	255 4257 912	CQ93P2A183JT(NH2)		
	C614-623	257 3011 948	CF73=1H222JT(ECHUB5)		
	C624,625	254 4313 950	CE04W1H101MT(ASF)		
	C626-629	257 0512 903	CK73F1E104ZT		
	C630,631	254 4313 950	CE04W1H101MT(ASF)		
	C634,635	254 4313 950	CE04W1H101MT(ASF)		
	C636-639	257 0512 903	CK73F1E104ZT		
	C640	254 4598 908	CE04W1H220MTBP(ASF)		
	C641,642	254 4313 950	CE04W1H101MT(ASF)		
	C643	254 4598 908	CE04W1H220MTBP(ASF)		
	C646,647	257 0503 925	CC73CH1H100DT		
	C648,649	254 4598 908	CE04W1H220MTBP(ASF)		
	C650,651	255 4254 931	CQ93P2A122JT(NH2)		
	C652,653	257 0503 925	CC73CH1H100DT		
	C654-656	254 4598 908	CE04W1H220MTBP(ASF)		
	C657,658	257 0503 925	CC73CH1H100DT		
	C663-665	254 4313 950	CE04W1H101MT(ASF)		
	C666	257 0512 903	CK73F1E104ZT		
	C667	254 4313 950	CE04W1H101MT(ASF)		
	C668,669	257 0512 903	CK73F1E104ZT		
	C670	254 4313 950	CE04W1H101MT(ASF)		
	C671	257 0512 903	CK73F1E104ZT		
	C672	254 4313 950	CE04W1H101MT(ASF)		
	C678	255 4256 955	CQ93P2A103JT(NH2)		
	C680	255 4256 955	CQ93P2A103JT(NH2)		
	C682	254 4558 702	CE04W1H101MC(RFS)		
	C684	254 4558 702	CE04W1H101MC(RFS)		
	C685-688	254 4313 950	CE04W1H101MT(ASF)		
	C690	255 4256 955	CQ93P2A103JT(NH2)		
	C692	255 4256 955	CQ93P2A103JT(NH2)		
	C694	254 4558 702	CE04W1H101MC(RFS)		
	C696	254 4558 702	CE04W1H101MC(RFS)		
	C698	254 4558 702	CE04W1H101MC(RFS)		
	C700	254 4558 702	CE04W1H101MC(RFS)		
	C702	254 4558 702	CE04W1H101MC(RFS)		
	C704	254 4558 702	CE04W1H101MC(RFS)		
	C705,706	257 0508 933	CC73CH1H561JT		
	C707,708	255 4253 932	CQ93P2A471JT(NH2)		
	C709-712	257 0509 929	CK73B1H102KT		
	C713,714	255 4253 932	CQ93P2A471JT(NH2)		
	C724	257 0509 929	CK73B1H102KT		
	C725	257 0516 954	CK73B1E104KT		
	C726-731	257 3006 911	CF73=1C104JT(ECHUB5)		
	C746	257 0512 903	CK73F1E104ZT		
OTHER PARTS GROUP					
	CW034	203 5318 011	3P EH-SCN CON.CORD		*
	CW035	203 5317 009	3P PH-SAN CON.CORD		*
	CW051	203 8524 019	5P SAN-SAN CON.CORD		*
	CW052	203 8519 037	5P PH-SAN CON.CORD		*
	CX032	205 0449 033	3P VH CONNECTOR BASE		
	CX033	205 0343 032	3P CONN.BASE(KR-PH)		
	CX052	205 0355 059	5P KR CON BASE(L)		
	CX061	205 0343 061	6P CONN.BASE(KR-PH)		
	CX171-173	205 1100 038	17P FFC BASE(P=1)		
	CX191	205 0892 020	19P FFC BASE (P=1)		

	Ref.No.	Part No.	Part Name	Remarks	New
	CX251	205 1260 004	25P FFC BASE (9610SA		
	CX301	205 0892 075	30P FFC BASE (P=1)		
	CY025	205 0581 056	2P VH CONNECTOR BASE		
	CY081	205 0343 087	8P CONN.BASE(KR-PH)		
	CY172	205 1006 080	17P FFC BASE(P=1)		
	CY301	205 1226 909	30P CONNECTOR(AXN3)S		
	CY401	205 1226 912	40P CONNECTOR(AXN3)S		
	FB303,304	247 2018 903	RM73B--0R0KT		
	FB401	247 2018 903	RM73B--0R0KT		
	FB402-412	235 0130 903	CHIP EMIFIL(11A121)		
	FB414-437	235 0130 903	CHIP EMIFIL(11A121)		
	FB439-471	235 0130 903	CHIP EMIFIL(11A121)		
	FB472	235 0048 901	EMI FILTER (103)TP		
	FB473	235 0130 903	CHIP EMIFIL(11A121)		
	FB487,488	235 0130 903	CHIP EMIFIL(11A121)		
	FB518,519	235 0130 903	CHIP EMIFIL(11A121)		
	FL101	393 8060 009	FL TUBE(17-ST-04GNK)		
	J401	205 0339 004	JM JUMPER CONNECTOR		
	JK301	269 0211 003	GP1FA553TZ		
	JK302	204 8648 008	1P PIN JACK(F-GNDAU)		
	JK303	205 1153 001	9P S SUB CONNECTOR		
	JK306,307	204 8612 005	MINI JACK		
	JK309	205 1222 000	RJ-45 JACK(GND)		
	JK501,502	204 8682 006	YKC21-3885N(4PJACKAU		
	RL501,502	214 0203 008	RELAY(NA12W-K)		
	S101	212 1030 009	POWER SWITCH (TV-5)		
	S102	212 5604 910	TACT SWITCH-TA(ALPS)		
	S103	212 0410 002	ROTARY ENCODER-JOG		
	S104-111	212 5604 910	TACT SWITCH-TA(ALPS)		
	S401	205 0341 018	3P RE HEADER		
	ST102	205 1034 007	M3 SCREW TERMINAL		
	ST104	205 0452 017	STYLE PIN		
	ST110	205 1034 007	M3 SCREW TERMINAL		
	T301	231 8063 009	PULSE TRANS		
	W703,704	203 0723 009	1P WIRE	for JP	*
	X101	399 0151 008	X-TAL(4.332MHZ)		
	X301	399 0618 004	X'TAL(24.57MHZ)		
	X401	399 0805 914	CSTLS16M0X51-A0		
		203 0722 000	1P CONTACT ASS'Y		
		415 0299 000	CONDENSER COVER		
		461 1125 118	FL SPACER		

Note: The symbols in the column "Remarks" indicate the following destinations.
E2 : Europe model
E3 : U.S.A. & Canada model
JP : Japan model

GU-3514 VIDEO UNIT ASS'Y

	Ref.No.	Part No.	Part Name	Remarks	New
SEMICONDUCTORS GROUP					
	IC501	263 1078 904	BA05FP		
	IC504	262 3302 002	SII170B		*
	IC505	262 1782 909	TC7S08FTE85L		
	IC601	262 3237 009	ADV7310		*
	IC602	263 1158 905	BH7862F	for E2	
	IC603	262 1793 901	TC4W53F	for E2	
	IC701	262 3237 009	ADV7310		*
	IC702	262 1348 903	TC74HC123AF(TP1)		
	IC704-708	263 1082 903	TK15420MTL		
	IC709	262 1793 901	TC4W53F		
	IC710,711	263 1082 903	TK15420MTL		
	IC716,717	262 3301 906	SN74LVC245APW		
	IC731	262 2977 917	BA25BC0FP-E2		*
	IC732	262 2977 904	BA18BC0FP-E2		
	IC733	262 3303 001	K4S643232#-TC60		
	IC734	262 3239 007	FLI2310		*
	IC801	262 3277 904	SN74LVC157APW-EL2		
	TR501	273 0460 905	KTC2875B-RTK		
	TR502	275 0110 905	HN1K02FU-TE85L		*
	TR503,504	269 0082 902	DTC114EKT96		
	TR505,506	273 0460 905	KTC2875B-RTK		
	TR507	269 0082 902	DTC114EKT96		
	TR601-603	271 0293 901	2SA1022-B	for E2	
	TR701	274 0163 904	2SD601A		
	TR702	272 0125 904	2SB709A		
	TR703	271 0293 901	2SA1022-B		
	TR704	272 0125 904	2SB709A		
	TR705-707	271 0293 901	2SA1022-B		
	TR708	274 0163 904	2SD601A		
	TR709	271 0293 901	2SA1022-B		
	TR710	272 0125 904	2SB709A		
	TR711-713	271 0293 901	2SA1022-B		
	TR714	272 0125 904	2SB709A		
	TR715,716	274 0163 904	2SD601A		
	TR717	272 0125 904	2SB709A	for JP	
	TR718	274 0163 904	2SD601A	for JP	
	TR719	272 0125 904	2SB709A	for JP	
	TR720	274 0163 904	2SD601A	for JP	
	TR721-723	274 0163 904	2SD601A		
	TR724	272 0125 904	2SB709A	for JP	
	TR725	274 0163 904	2SD601A	for JP	
	D501	276 0717 903	1SS355 TE-17		
	D502	276 0750 902	RB521S-30TE61		
	D503	276 0717 903	1SS355 TE-17		
	D701-704	276 0717 903	1SS355 TE-17		
	D731,732	276 0717 903	1SS355 TE-17		
RESISTORS GROUP					
	RA501-507	247 9002 909	MNR14=330JE0AB		
	RA601-607	247 9002 909	MNR14=330JE0AB		
	RA701-707	247 9002 909	MNR14=330JE0AB		
	RA715-720	247 9007 917	MNR14=103JE0		
	RA721,722	247 9002 909	MNR14=330JE0AB		

	Ref.No.	Part No.	Part Name	Remarks	New
	VR702-706	211 6148 906	V03PB471MT(RH03ADCS)		
CAPACITORS GROUP					
	C501	254 4465 934	CE67C1C221MT		
	C502-504	257 0512 903	CK73F1E104ZT		
	C505	254 4464 906	CE67C0J101MT		
	C515	257 0509 929	CK73B1H102KT		
	C516	257 0512 903	CK73F1E104ZT		
	C517,518	254 4465 918	CE67C1C470MT		
	C519	254 4465 921	CE67C1C100MT		
	C520-522	257 0512 903	CK73F1E104ZT		
	C523	254 4465 905	CE67C1C220MT		
	C524	254 4465 921	CE67C1C100MT		
	C525	257 0512 903	CK73F1E104ZT		
	C526,527	257 0509 929	CK73B1H102KT		
	C531	254 4465 921	CE67C1C100MT		
	C533	257 0512 903	CK73F1E104ZT		
	C534	257 0509 929	CK73B1H102KT		
	C536,537	257 0512 903	CK73F1E104ZT		
	C538	257 0509 929	CK73B1H102KT		
	C540	254 4465 921	CE67C1C100MT		
	C542,543	257 0512 903	CK73F1E104ZT		
	C544-546	257 0509 929	CK73B1H102KT		
	C547	257 0512 903	CK73F1E104ZT		
	C551-553	257 0512 903	CK73F1E104ZT		
	C554	257 2010 924	CS77B1A470MT		
	C601	254 4464 906	CE67C0J101MT		
	C602,603	257 0512 903	CK73F1E104ZT		
	C604	254 4464 906	CE67C0J101MT		
	C609	257 0512 903	CK73F1E104ZT		
	C611	257 0509 903	CK73B1H821KT		
	C612	254 4464 906	CE67C0J101MT		
	C613	257 0512 903	CK73F1E104ZT		
	C614	257 0510 921	CK73B1H392KT		
	C615-617	257 0512 903	CK73F1E104ZT	for E2	
	C618	254 4464 906	CE67C0J101MT		
	C620,621	254 4571 912	CE67C1H010MT(MV-B)	for E2	
	C622,623	254 4465 918	CE67C1C470MT	for E2	
	C624	257 0504 908	CC73CH1H220JT	for E2	
	C626	257 0512 903	CK73F1E104ZT	for E2	
	C627	254 4464 906	CE67C0J101MT	for E2	
	C632	254 4464 906	CE67C0J101MT	for E2	
	C633	254 4464 951	CE67C0J220MT(MV-B)	for E2	
	C634,635	254 4533 947	CE04W0J331MT SMG/RE3	for E2	
	C637	257 0511 904	CK73F1H103ZT		
	C638	257 0512 903	CK73F1E104ZT		
	C705	254 4464 906	CE67C0J101MT		
	C706,707	257 0512 903	CK73F1E104ZT		
	C708	254 4464 906	CE67C0J101MT		
	C709	257 0509 929	CK73B1H102KT		
	C713	257 0511 904	CK73F1H103ZT		
	C714,715	257 0512 903	CK73F1E104ZT		
	C717	257 0509 903	CK73B1H821KT		
	C718	254 4464 906	CE67C0J101MT		
	C719	257 0512 903	CK73F1E104ZT		
	C720	257 0510 921	CK73B1H392KT		
	C721	257 0507 934	CC73CH1H221JT		
	C723	257 0512 903	CK73F1E104ZT		
	C725-729	257 0512 903	CK73F1E104ZT		
	C730	254 4464 906	CE67C0J101MT		

	Ref.No.	Part No.	Part Name	Remarks	New
	C731	257 0509 929	CK73B1H102KT		
	C733-737	257 0512 903	CK73F1E104ZT		
	C738	257 0502 971	CC73CH1H5R0CT		
	C753	257 0509 929	CK73B1H102KT		
	C754-757	257 0512 903	CK73F1E104ZT		
	C758-761	254 4464 906	CE67C0J101MT		
	C766	257 0512 903	CK73F1E104ZT		
	C767	254 4465 918	CE67C1C470MT		
	C768	257 0512 903	CK73F1E104ZT		
	C769	254 4465 918	CE67C1C470MT		
	C773-775	257 0512 903	CK73F1E104ZT		
	C776	254 4465 918	CE67C1C470MT		
	C777,778	254 4464 951	CE67C0J220MT(MV-B)		
	C779	257 0512 903	CK73F1E104ZT		
	C780,781	254 4464 906	CE67C0J101MT		
	C782	254 4464 951	CE67C0J220MT(MV-B)		
	C783-786	257 0512 903	CK73F1E104ZT		
	C787	254 4465 918	CE67C1C470MT		
	C788-790	254 4464 951	CE67C0J220MT(MV-B)		
	C791	257 0512 903	CK73F1E104ZT		
	C792,793	257 0501 901	CK73B1H103KT (1608)		
	C795	257 0504 940	CC73CH1H330JT		
	C796	254 4464 906	CE67C0J101MT		
	C797,798	254 4572 908	CE67C1C100MT(MV-B)		
	C799-801	257 0512 903	CK73F1E104ZT		
	C802,803	254 4464 951	CE67C0J220MT(MV-B)		
	C804,805	257 0512 903	CK73F1E104ZT		
	C806,807	254 4464 951	CE67C0J220MT(MV-B)		
	C808-819	257 0504 982	CC73CH1H470JT		
	C828	257 0512 903	CK73F1E104ZT		
	C829	257 0501 901	CK73B1H103KT (1608)		
	C831,832	257 0506 951	CC73CH1H101JT		
	C833,834	257 0512 903	CK73F1E104ZT	for JP	
	C835,836	254 4464 951	CE67C0J220MT(MV-B)	for JP	
	C837,838	257 0512 903	CK73F1E104ZT	for JP	
	C839,840	254 4464 951	CE67C0J220MT(MV-B)	for JP	
	C841	254 4464 906	CE67C0J101MT		
	C842-844	257 0512 903	CK73F1E104ZT		
	C845	254 4464 906	CE67C0J101MT		
	C846	257 0512 903	CK73F1E104ZT		
	C847	254 4464 906	CE67C0J101MT		
	C848-850	257 0512 903	CK73F1E104ZT		
	C851	257 0511 904	CK73F1H103ZT		
	C852,853	257 0512 903	CK73F1E104ZT		
	C854	254 4464 906	CE67C0J101MT		
	C855	257 0512 903	CK73F1E104ZT		
	C857	254 4464 906	CE67C0J101MT		
	C858	257 0512 903	CK73F1E104ZT		
	C859	257 0511 904	CK73F1H103ZT		
	C860	257 2010 937	CS77B1A220MT		
	C861	254 4464 906	CE67C0J101MT		
	C862	257 0512 903	CK73F1E104ZT		
	C863	257 0511 904	CK73F1H103ZT		
	C864-868	257 0512 903	CK73F1E104ZT		
	C869	257 0503 983	CC73CH1H180JT		
	C870	257 0512 903	CK73F1E104ZT		
	C871	257 0503 983	CC73CH1H180JT		
	C872-880	257 0512 903	CK73F1E104ZT		
	C881	254 4464 906	CE67C0J101MT		
	C882	257 0512 903	CK73F1E104ZT		
	C883	254 4464 906	CE67C0J101MT		

	Ref.No.	Part No.	Part Name	Remarks	New
	C884	257 0511 904	CK73F1H103ZT		
	C885-887	257 0512 903	CK73F1E104ZT		
	C888	257 0501 901	CK73B1H103KT (1608)		
	C889-891	257 0512 903	CK73F1E104ZT		
	C991-997	257 0512 903	CK73F1E104ZT		
OTHER PARTS GROUP					
	CX031	205 0233 032	3P EH CONNECTOR BASE		
	CX101	205 1072 933	10PPH CON BASE(TAPE)	for E2	
	CX401,402	205 1276 904	40P CON.SOCKET 9828S		*
	CY041	205 1072 917	4P PH CON BASE(TAPE)		
	CY331	205 1174 970	33P FFC BASE(FMNSMT)		
	CY401,402	205 1274 906	40P CON.PLUG 9828B		*
	FB502-505	235 0125 905	INDUCTOR(FLC32C220K)		
	FB731	247 2018 903	RM73B--0R0KT		
	JK501	205 1275 002	24P DVI CONNECTOR		*
	JK701	204 8691 000	2P PIN JACK(AU)		*
	JK702	204 8633 000	2P S-TERMINAL(AU)		
	JK703	204 8690 001	3P PIN JACK(AU)		*
	JK704	204 6755 003	D-CONNECTOR(AU)	for JP	*
	JK707	205 1270 007	3P BNC JACK(JALCO)AU		*
	L602,603	235 0125 905	INDUCTOR(FLC32C220K)		
	L604	235 0125 905	INDUCTOR(FLC32C220K)	for E2	
	L607	235 0125 905	INDUCTOR(FLC32C220K)		
	L702-705	235 0125 905	INDUCTOR(FLC32C220K)		
	L707,708	261 0159 909	ELB4B584		
	L709	261 0163 908	ELB4B591N		*
	L710	261 0162 909	ELB4C582N		*
	L711-714	235 0125 905	INDUCTOR(FLC32C220K)		
	L715	235 0060 934	INDUCTOR(470)ST		
	L731	235 0125 905	INDUCTOR(FLC32C220K)		
	L733	235 0125 905	INDUCTOR(FLC32C220K)		
	W501-503	205 1034 007	M3 SCREW TERMINAL		
	X731	399 0864 900	X'TAL(13.5MHZ)		*

Note: The symbols in the column "Remarks" indicate the following destinations.
E2 : Europe model
E3 : U.S.A. & Canada model
JP : Japan model

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	Ref.No.	Part No.	Part Name	Remarks	New
SEMICONDUCTORS GROUP					
	IC901	262 3283 008	STR-F6652(LF1351)		*
	IC902,903	262 3047 008	PC123 Y-22		
	IC904	263 1185 907	TL431ACLP		*
	IC909	263 1179 007	NJM7805FA(SS)-#4MS		
	IC910	263 1186 003	SI-8033S(LF1101)		*
	IC911	263 1179 023	NJM7808FA(SS)-#4MS		*
	IC913	268 0074 904	ICP-N20T		
	IC914	263 1179 007	NJM7805FA(SS)-#4MS		
	IC951	263 1179 007	NJM7805FA(SS)-#4MS		
	IC952	263 0554 005	NJM7905FA		
	IC953	263 1179 049	NJM7812FA(SS)-#4MS		*
	IC954	263 0641 002	NJM7912FA		
	IC955	263 1179 023	NJM7808FA(SS)-#4MS		*
	IC956	263 1179 007	NJM7805FA(SS)-#4MS		
	TR901	273 0303 910	2SC1740S(S)-T		
	TR902	272 0083 004	2SB1185(E/F)		
	TR903	269 0083 901	DTA114EKT96		
	TR904,905	274 0036 905	2SD468(C)TF		
	TR906	269 0083 901	DTA114EKT96		
	TR908	275 0106 906	HAT2053M(TAPE)		
	TR909	274 0036 905	2SD468(C)TF		
	TR910	269 0083 901	DTA114EKT96		
	TR911-913	269 0082 902	DTC114EKT96		
	D901-904	276 0729 904	EM01AT (V1)		
	D905	276 0730 906	AG01ZT (V1)		
	D906	276 0724 909	SARS01T (V1)		
	D907-909	276 0730 906	AG01ZT (V1)		
	D910	276 0745 904	RB411DT146		
	D911	276 0757 002	FML-G12S		
	D912	276 0783 005	FMB-2204		
	D914,915	276 0730 906	AG01ZT (V1)		
	D916-919	276 0401 905	1SS133T77 (TAPE)		
	D920	276 0753 006	RK33 LF-C4		
	D921	276 0401 905	1SS133T77 (TAPE)		
	D952	276 0305 001	S4VB20		
	D953-956	276 0765 900	1SR139-400T-31		
	ZD901	276 0457 904	HZS4C-1TD		
	TH901	279 0044 002	NTH11D8R0LA		
	RESISTORS GROUP				
	R901	244 2675 729	RS14B3D224JNBF (ERG)	for E2	
	R901	244 2675 716	RS14B3D683JNBF (ERG)	for E3, JP	
	R902,903	244 2671 956	RS14B3DR47JNBST(S)		
	R906	244 2675 729	RS14B3D224JNBF (ERG)		
	R907	244 2675 703	RS14B3D470JNBF (ERG)		
	R916	244 2052 973	RS14B3A561JNBST(S)		
	R920	244 2052 944	RS14B3A152JNBST(S)		
	R939	244 2043 908	RS14B3A681JNBST(S)		
	R951	244 2051 974	RS14B3A102JNBST(S)		
	R952	244 2043 940	RS14B3A222JNBST(S)		

	Ref.No.	Part No.	Part Name	Remarks	New
	R955-957	247 2018 903	RM73B–0R0KT	for JP	
	R965	244 2043 908	RS14B3A681JNBST(S)		
	CAPACI-TORS GROUP				
	C895	253 8029 700	CK45F2EAC222MC (KX)	for E3, E2	
	C896	257 0512 903	CK73F1E104ZT		
	C897	257 0511 904	CK73F1H103ZT	for E3, E2	
	C898	257 0512 903	CK73F1E104ZT	for E3, E2	
	C899	257 0511 904	CK73F1H103ZT	for E3, E2	
	C900	257 0512 903	CK73F1E104ZT	for E3, E2	
	C901	253 8022 707	CK45F2EAC103MC		
	C902	256 8038 017	CF99–2EAC224M		
	C903	256 8038 004	CF99–2EAC104M		
	C904	257 0512 903	CK73F1E104ZT	for E3, E2	
	C905	257 0511 904	CK73F1H103ZT	for E3, E2	
	C906	257 0512 903	CK73F1E104ZT	for E3, E2	
	C907	257 0511 904	CK73F1H103ZT	for E3, E2	
	C908	254 4589 700	CE04W2G470MC (KMG)	for E2	
	C908	254 4589 713	CE04W2G101MC(KMG)	for E3, JP	
	C909	253 4546 708	CC45SL3D471JC		
	C910	257 0512 903	CK73F1E104ZT		
	C911	257 0511 904	CK73F1H103ZT	for E3, E2	
	C912	253 4452 902	CC45SL1H471JT		
	C913	253 9030 963	CK45=1E103KT		
	C914	254 4522 945	CE04W1V470MT SMG/RE3		
	C915	253 8028 701	CK45R3A222KC		
	C916	255 1249 936	CQ93M1H821JT (B)		
	C917	253 8029 700	CK45F2EAC222MC (KX)		
	C918	254 4592 742	CE04W1C222MCK30(LXV)		
	C919	254 4596 706	CE04W1C122MC J30(LXJ		
	C920,921	254 4591 905	CE04W1H101MT (KMF)		
	C922	254 4596 706	CE04W1C122MC J30(LXJ		
	C923	253 9030 921	CK45=1E222KT		
	C924	257 0512 903	CK73F1E104ZT		
	C925	254 4533 921	CE04W0J101MT SMG/RE3		
	C926,927	254 4538 955	CE04W1C221MT SMG/RE3		
	C929	254 4525 913	CE04W1H470MT SMG/RE3		
	C930	254 4538 942	CE04W1C101MT SMG/RE3		
	C931	257 0512 903	CK73F1E104ZT		
	C933	257 0512 903	CK73F1E104ZT		
	C934	254 4539 705	CE04W1C102MC SMG/RE3		
	C935	257 0512 903	CK73F1E104ZT		
	C936	254 4533 921	CE04W0J101MT SMG/RE3		
	C938,939	254 4533 921	CE04W0J101MT SMG/RE3		
	C940,941	257 0512 903	CK73F1E104ZT		
	C943	254 4596 706	CE04W1C122MC J30(LXJ		
	C944	254 4522 945	CE04W1V470MT SMG/RE3		
	C945	254 4538 942	CE04W1C101MT SMG/RE3		
	C946-948	257 0512 903	CK73F1E104ZT		
	C949	257 0511 904	CK73F1H103ZT		
	C950-952	257 0512 903	CK73F1E104ZT		
	C953	257 0511 904	CK73F1H103ZT		
	C954-959	257 0512 903	CK73F1E104ZT		
	C960	257 0511 904	CK73F1H103ZT	for E3, E2	
	C961,962	257 0509 929	CK73B1H102KT	for E3, E2	
	C963	257 0511 904	CK73F1H103ZT	for E3, E2	
	C964	257 0512 903	CK73F1E104ZT	for E3, E2	
	C965-967	255 4256 955	CQ93P2A103JT(NH2)		
	C970,971	254 4558 731	CE04W1H332MC(RFS)		

	Ref.No.	Part No.	Part Name	Remarks	New
	C972,973	254 4599 703	CE04W1C222MC (KMF)		
	C974-976	257 0511 904	CK73F1H103ZT		
	C979,980	254 4558 728	CE04W1H471MC(RFS)		
	C981,982	254 4368 947	CE04W1E221MT(ASF)		
	C985,986	257 0509 929	CK73B1H102KT		
	C987,988	257 0512 903	CK73F1E104ZT		
	C989	257 0511 904	CK73F1H103ZT		
	C990	257 0512 903	CK73F1E104ZT		
	C991,992	257 0512 903	CK73F1E104ZT	for E3,E2	
	C993	253 9030 963	CK45=1E103KT		
	C994	253 9030 989	CK45=1E223KT		
	C995	254 4313 918	CE04W1H100MT(ASF)		
	C996,997	255 4256 955	CQ93P2A103JT(NH2)		
	C998	254 4313 950	CE04W1H101MT(ASF)		
	C999	257 0512 903	CK73F1E104ZT		
	OTHER PARTS GROUP				
	AS901	417 0610 012	HEAT SINK(OSH-2440)	for E2	*
	AS901	417 0610 009	HEAT SINK(OSH-2430)	for E3, JP	
	AS909	417 0651 107	HEAT PLATE		*
	AS910	417 0476 023	RADIATOR		
	AS912	417 0592 004	HEAT SINK		
	AS951,952	417 0476 010	RADIATOR		
	AS953,954	417 0476 036	RADIATOR		
	AS955,956	417 0476 010	RADIATOR		
	CW031	203 5318 008	3P EH-SCN CON.CORD		*
	CX024	205 0581 001	2P VH CONNECTOR BASE		
	CX025	205 0581 056	2P VH CONNECTOR BASE		
	CX026	205 1093 006	2P VH CONNECTOR BASA		
	CX034	205 0233 032	3P EH CONNECTOR BASE		
	CX035	205 0343 032	3P CONN.BASE(KR-PH)		
	CX036	205 0343 032	3P CONN.BASE(KR-PH)	for E2	
	CX041	205 0343 045	4P CONN.BASE(KR-PH)		
	CX062	205 0653 065	6P VH CONNECTOR BASE		
	CX081	205 0343 087	8P CONN.BASE(KR-PH)		
	CX101	205 0375 000	10P CON.BASE(KR-PH)		
	CY032	205 0653 036	3P VH CON.BASE		
	F901	206 1075 001	FUSE (1A)	for E2	
	F901	206 1072 020	FUSE 1.6A	for E3, JP	
	F902	206 1075 030	FUSE(2.0A)	for E2	
	F902	206 1072 033	FUSE 2A	for E3, JP	*
	FF901,902	202 0040 909	FUSE CLIP (TAPE)		
	FH901,902	202 0040 909	FUSE CLIP (TAPE)		
	L902	235 0157 009	PLA10AN7720R7D2B		
	L904	235 0142 917	COIL LHL08TB4R7MT		
	L906	235 0142 904	COIL LHL08TB220KT		
	L908,909	235 0142 920	COIL LHL08TB100KT		
	L911	235 0167 905	COIL LHL13TB680KT		*
	RL901	214 0202 009	RELAY DG1U TV-8		
	ST901,902	205 0452 017	STYLE PIN		
	ST903	205 0452 017	STYLE PIN	for E2	

	Ref.No.	Part No.	Part Name	Remarks	New
	ST991-995	205 0452 017	STYLE PIN		
	T901	233 6454 001	SW TRANSFORMER(WIDE)		*
	W902	205 1034 007	M3 SCREW TERMINAL		
		412 2160 015	COMMON PLATE		
		471 2305 015	3X10 CFS		
		471 3303 016	3X6 CBS-Z		
		471 3304 015	3X8 CBS-Z		
		471 3305 027	3X10 CBS		
		513 3827 045	FUSE LABEL	for E2	
		513 3827 058	FUSE LABEL	for E2	
		513 3827 061	FUSE LABEL	for E2	

Note: The symbols in the column "Remarks" indicate the following destinations.
E2 : Europe model
E3 : U.S.A. & Canada model
JP : Japan model

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	Ref.No.	Part No.	Part Name	Remarks	New
SEMICONDUCTORS GROUP					
	IC103	262 3268 900			*
	IC104	262 3269 909	SN74LVC125APW-EL2		*
	IC106	262 3260 908	FCX0-03(24.576M/30)		*
	IC108	262 3260 908	FCX0-03(24.576M/30)		*
	IC110	262 3261 907	CY2302		*
	IC111	262 3274 004	TSB41AB2		*
	IC201	262 3262 003	DM1000-DVD		*
	IC202	262 3268 900	SN74LVC00APW-EL2		*
	IC203	262 3264 904	RN5VD15AA		*
	IC204	262 3272 909	SN74LVC1G08DBV		*
	IC205	262 3265 903	LM1117MPX-1.8		*
	IC206	262 3263 905	RN5VD30AA		*
	IC207	262 3273 908	SN74LV4051APW-EL2		*
	IC401	GEN6485	IC401 1394 ROM SUB ASS'Y	M29W160DB70N1	
	IC402	262 3266 009	IC61LV25616-10T		*
	IC501	262 2518 907	SN74LV74APW-EL2		
	IC503	262 3268 900	SN74LVC00APW-EL2		*
	IC504	262 3277 904	SN74LVC157APW-EL2		*
	IC505	262 3261 907	CY2302		*
	IC507	262 3277 904	SN74LVC157APW-EL2		*
	IC509	262 3268 900	SN74LVC00APW-EL2		*
	IC510,511	262 3276 905	SN74LVC1GU04DBV		*
	IC512	263 0686 902	BA10358FT		
	TR501,502	269 0083 901	DTA114EKT96		
	D103	276 0750 902	RB521S-30TE61		
	D203	276 0717 903	1SS355 TE-17		
	D501-504	276 0795 909	HVU363A		*
CAPACITORS GROUP					
	C104	257 0509 929	CK73B1H102KT		
	C105	257 0516 954	CK73B1E104KT		
	C119	257 0513 902	CK73F1A105ZT		
	C120	257 0507 934	CC73CH1H221JT		
	C122	257 0507 934	CC73CH1H221JT		
	C123	257 0513 902	CK73F1A105ZT		
	C124	257 0504 982	CC73CH1H470JT		
	C125	254 4572 908	CE67C1C100MT(MV-B)		
	C126	257 0516 954	CK73B1E104KT		
	C127	257 0509 929	CK73B1H102KT		
	C128	254 4572 908	CE67C1C100MT(MV-B)		
	C129,130	257 0516 954	CK73B1E104KT		
	C131	254 4572 908	CE67C1C100MT(MV-B)		
	C132	257 0509 929	CK73B1H102KT		
	C133	257 0516 954	CK73B1E104KT		
	C134,135	257 0509 929	CK73B1H102KT		
	C136	257 0516 954	CK73B1E104KT		
	C137	254 4572 908	CE67C1C100MT(MV-B)		
	C138	257 0516 954	CK73B1E104KT		
	C140	257 0516 954	CK73B1E104KT		
	C141	257 0509 929	CK73B1H102KT		
	C142	257 0516 954	CK73B1E104KT		
	C143	254 4572 908	CE67C1C100MT(MV-B)		
	C158	257 0516 954	CK73B1E104KT		

	Ref.No.	Part No.	Part Name	Remarks	New
	C159	257 0509 929	CK73B1H102KT		
	C161-163	257 0509 929	CK73B1H102KT		
	C164	257 0516 954	CK73B1E104KT		
	C165	257 0509 929	CK73B1H102KT		
	C166	257 0516 954	CK73B1E104KT		
	C168	257 0509 929	CK73B1H102KT		
	C169	257 0516 954	CK73B1E104KT		
	C173	257 0504 982	CC73CH1H470JT		
	C174	257 0509 929	CK73B1H102KT		
	C175	257 0516 954	CK73B1E104KT		
	C201,202	257 0509 929	CK73B1H102KT		
	C203	257 0516 954	CK73B1E104KT		
	C204	257 0509 929	CK73B1H102KT		
	C205,206	257 0516 954	CK73B1E104KT		
	C207-209	254 4572 908	CE67C1C100MT(MV-B)		
	C211	254 4572 908	CE67C1C100MT(MV-B)		
	C213	257 0516 954	CK73B1E104KT		
	C214	257 0509 929	CK73B1H102KT		
	C217	254 4572 908	CE67C1C100MT(MV-B)		
	C218	257 0516 954	CK73B1E104KT		
	C219,220	257 0509 929	CK73B1H102KT		
	C221	257 0516 954	CK73B1E104KT		
	C222	254 4464 951	CE67C0J220MT(MV-B)		
	C223	257 0509 929	CK73B1H102KT		
	C224	257 0516 954	CK73B1E104KT		
	C225	254 4572 908	CE67C1C100MT(MV-B)		
	C226	257 0509 929	CK73B1H102KT		
	C227	257 0516 954	CK73B1E104KT		
	C228,229	254 4572 908	CE67C1C100MT(MV-B)		
	C230	257 0516 954	CK73B1E104KT		
	C231	257 0509 929	CK73B1H102KT		
	C232	254 4572 908	CE67C1C100MT(MV-B)		
	C233-235	257 0509 929	CK73B1H102KT		
	C236	257 0516 954	CK73B1E104KT		
	C237	257 0509 929	CK73B1H102KT		
	C238	257 0516 954	CK73B1E104KT		
	C239	257 0509 929	CK73B1H102KT		
	C240,241	257 0506 951	CC73CH1H101JT		
	C242	257 0516 954	CK73B1E104KT		
	C243	257 0509 929	CK73B1H102KT		
	C244	257 0516 954	CK73B1E104KT		
	C245	257 0509 929	CK73B1H102KT		
	C246	257 0516 954	CK73B1E104KT		
	C248	254 4465 921	CE67C1C100MT		
	C401,402	257 0516 954	CK73B1E104KT		
	C403,404	257 0509 929	CK73B1H102KT		
	C405	257 0516 954	CK73B1E104KT		
	C406	257 0509 929	CK73B1H102KT		
	C407	257 0516 954	CK73B1E104KT		
	C501	257 0509 929	CK73B1H102KT		
	C502	257 0516 954	CK73B1E104KT		
	C505	257 0509 929	CK73B1H102KT		
	C506	257 0516 954	CK73B1E104KT		
	C507	257 0509 929	CK73B1H102KT		
	C508	257 0516 954	CK73B1E104KT		
	C509	257 0509 929	CK73B1H102KT		
	C510	257 0516 954	CK73B1E104KT		
	C511	257 0509 929	CK73B1H102KT		
	C512	257 0516 954	CK73B1E104KT		
	C513	257 0509 929	CK73B1H102KT		
	C514	257 0516 954	CK73B1E104KT		

	Ref.No.	Part No.	Part Name	Remarks	New
	C515	257 0509 929	CK73B1H102KT		
	C516,517	257 0516 954	CK73B1E104KT		
	C518	257 0509 929	CK73B1H102KT		
	C521	257 0511 904	CK73F1H103ZT		
	C522	257 0509 929	CK73B1H102KT		
	C523	257 0511 904	CK73F1H103ZT		
	C524	257 0509 929	CK73B1H102KT		
	C525	257 0516 954	CK73B1E104KT		
	C526	257 0509 929	CK73B1H102KT		
	C527	257 0516 954	CK73B1E104KT		
	C528	257 0509 929	CK73B1H102KT		
	C529	257 0516 954	CK73B1E104KT		
	C530	257 0509 929	CK73B1H102KT		
	C535	257 0516 954	CK73B1E104KT		
	C536	254 4465 905	CE67C1C220MT		
	C537	257 0516 954	CK73B1E104KT		
	C538,539	257 0509 929	CK73B1H102KT		
	C540	257 0516 954	CK73B1E104KT		
	C541,542	257 0509 929	CK73B1H102KT		
	C543	257 0516 954	CK73B1E104KT		
	C544,545	257 0509 929	CK73B1H102KT		
	C546	257 0516 954	CK73B1E104KT		
	C547	254 4571 912	CE67C1H010MT(MV-B)		
	C554	257 0509 929	CK73B1H102KT		
	C555	257 0516 954	CK73B1E104KT		
	C558,559	254 4571 912	CE67C1H010MT(MV-B)		
OTHER PARTS GROUP					
	CN201	205 1072 959	7P PH CON.BASE		
	CY173	205 1170 903	17P FFC BASE(FMNBMTT		
	CY191	205 1170 916	19P FFC BASE(FMNBMTT		
	FB101,102	235 0130 903	CHIP EMIFIL(11A121)		
	FB503	235 0147 909	E.FIL(BLM21PG221SN1)		
	FB504-516	235 0130 903	CHIP EMIFIL(11A121)		
	FB517	235 0147 909	E.FIL(BLM21PG221SN1)		
	FB518-523	235 0130 903	CHIP EMIFIL(11A121)		
	FB524	235 0147 909	E.FIL(BLM21PG221SN1)		
	FB525,526	235 0130 903	CHIP EMIFIL(11A121)		
	JK101,102	205 1269 005	4P IEEE1394 JACK(H)		*
	L101-104	235 0168 904	DLP31SN221SL2		*
	S201	212 4807 909	TACT SW(SKQDAA)		
	SY101-108	276 0797 907	PGB0010603NR		*
	W101,102	205 1034 007	M3 SCREW TERMINAL		
	X501	399 0911 905	X'TAL(24.5760 FCX03)		*
	X502	399 0910 906	X'TAL(22.5792 FCX03)		*

Note: The symbols in the column "Remarks" indicate the following destinations.
E2 : Europe model
E3 : U.S.A. & Canada model
JP : Japan model

1U-3426B DSP UNIT ASS'Y

	Ref.No.	Part No.	Part Name	Remarks	New
SEMICONDUCTORS GROUP					
	IC801	262 3245 004	ADSST-MEL100-DVD		*
	IC802	262 2729 903	SN74LV02APW-EL2		
	IC803,804	262 2642 909	SN74LV573APW-EL2		
	IC805	GEN6332	IC805 DSP1 CPU SUB ASS'Y	M29W160DB90N1	
	IC806	262 2916 004	64M SDRAM(TSOP)		
	IC808	262 3063 901	FCX0-03(25.000MHZ)		
	IC901	262 3245 004	ADSST-MEL100-DVD		*
	IC902	262 2729 903	SN74LV02APW-EL2		
	IC903,904	262 2642 909	SN74LV573APW-EL2		
	IC905	GEN6333	IC905 DSP2 CPU SUB ASS'Y	M29W160DB90N1	
	IC906	262 2916 004	64M SDRAM(TSOP)		
	D801	276 0750 902	RB521S-30TE61		
	D901	276 0750 902	RB521S-30TE61		
CAPACITORS GROUP					
	C801	257 5009 974	CK73F1C104ZT		
	C802	257 5006 993	CK73B1H102KT		
	C803	254 4603 916	CE67W1E100MT(P.CAP)		
	C804	257 5009 974	CK73F1C104ZT		
	C805	257 5006 993	CK73B1H102KT		
	C806	254 4614 905	CA67C0J221MT(SVP)		
	C807-809	257 5009 974	CK73F1C104ZT		
	C810-812	257 5006 993	CK73B1H102KT		
	C813	254 4601 918	CE67W0J471MT(P.CAP)		
	C814-819	257 5009 932	CK73F1E223ZT		
	C820	257 5009 974	CK73F1C104ZT		
	C821	257 5006 993	CK73B1H102KT		
	C822	254 4603 916	CE67W1E100MT(P.CAP)		
	C901	257 5009 974	CK73F1C104ZT		
	C902	257 5006 993	CK73B1H102KT		
	C903	254 4603 916	CE67W1E100MT(P.CAP)		
	C904	257 5009 974	CK73F1C104ZT		
	C905	257 5006 993	CK73B1H102KT		
	C906	254 4614 905	CA67C0J221MT(SVP)		
	C907-909	257 5009 974	CK73F1C104ZT		
	C910-912	257 5006 993	CK73B1H102KT		
	C913	254 4601 918	CE67W0J471MT(P.CAP)		
	C914-919	257 5009 932	CK73F1E223ZT		
OTHER PARTS GROUP					
	CX301	205 1227 908	30P CONNECTOR(AXN4)H		
	CX401	205 1227 911	40P CONNECTOR(AXN4)H		
	S801	212 4807 909	TACT SW(SKQDAA)		
	S901	212 4807 909	TACT SW(SKQDAA)		

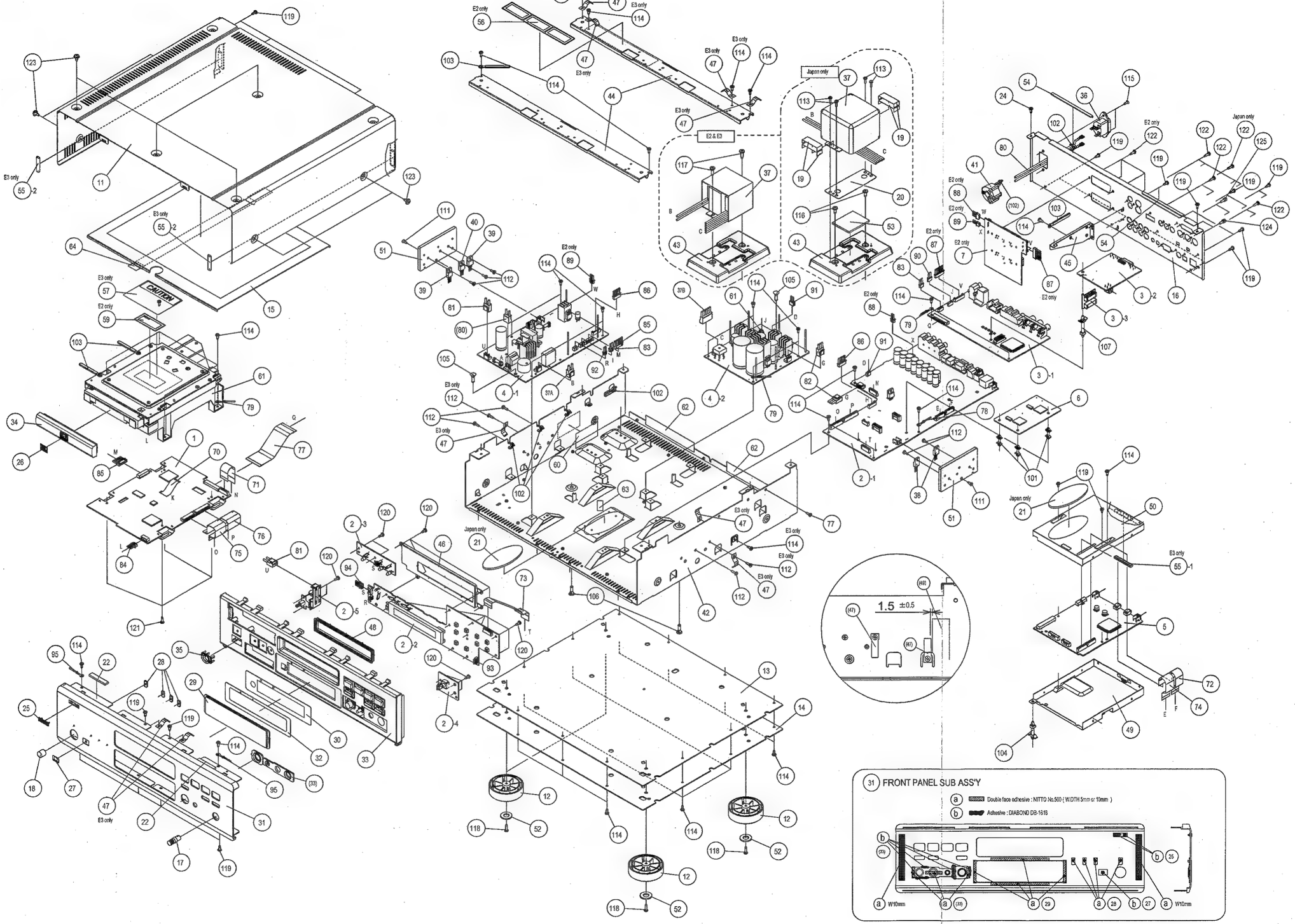
GU-3442A SCART UNIT ASS'Y (Europe model only)

	Ref.No.	Part No.	Part Name	Remarks	New
SEMICONDUCTORS GROUP					
	IC851-854	262 0707 901	TC4053BF (TAPE)		
	IC855	262 1793 901	TC4W53F		
	IC856	262 2534 907	BA7660FS-E2		
	IC857	263 1115 906	NJM2267M (TE2)		
	IC858	262 0707 901	TC4053BF (TAPE)		
	TR851,852	269 0054 901	DTC144EKT96		
	TR853	269 0085 909	DTC144TKT96		
	TR854,855	269 0054 901	DTC144EKT96		
	TR856	269 0123 900	DTC124TKT146		
	TR857	269 0119 901	DTA124EKT96(TAPE)		
	TR858	269 0123 900	DTC124TKT146		
	TR859	269 0119 901	DTA124EKT96(TAPE)		
	TR860	271 0260 905	2SA1036KT146(S/R)		
	TR861	273 0437 909	2SC2411K-T146		
	TR862-864	269 0054 901	DTC144EKT96		
	TR865	273 0437 909	2SC2411K-T146		
	TR866	271 0260 905	2SA1036KT146(S/R)		
	TR867	269 0054 901	DTC144EKT96		
	TR868	271 0260 905	2SA1036KT146(S/R)		
	TR869	273 0437 909	2SC2411K-T146		
	TR870	269 0054 901	DTC144EKT96		
	TR871	271 0260 905	2SA1036KT146(S/R)		
	TR872	272 0125 904	2SB709A		
	TR873	273 0437 909	2SC2411K-T146		
	TR874	272 0125 904	2SB709A		
	D851	276 0679 902	MA152A(TAPE)		
	D852	276 0628 908	MA152WK		
	D853	276 0679 902	MA152A(TAPE)		
	ZD851	276 0683 969	UDZS12B-TE17		
	ZD852	276 0683 972	UDZS13B-TE17		
CAPACITORS GROUP					
	C801,802	247 2018 903	RM73B--0R0KT		
	C809	257 0512 903	CK73F1E104ZT		
	C810	257 0511 904	CK73F1H103ZT		
	C811	257 0509 929	CK73B1H102KT		
	C831	254 4299 964	CE04W1C470MT(SRE)		
	C832,833	254 4300 963	CE04W0J101MT(SRE)		
	C834,835	257 0512 903	CK73F1E104ZT		
	C836,837	257 0508 917	CC73CH1H471JT		
	C838,839	257 0512 903	CK73F1E104ZT		
	C841-844	257 0512 903	CK73F1E104ZT		
	C845,846	257 0508 917	CC73CH1H471JT		
	C847,848	257 0506 951	CC73CH1H101JT		
	C851,852	257 0506 951	CC73CH1H101JT		
	C853	254 4299 964	CE04W1C470MT(SRE)		
	C854,855	254 4300 963	CE04W0J101MT(SRE)		
	C856-859	257 0512 903	CK73F1E104ZT		
	C860,861	254 4300 963	CE04W0J101MT(SRE)		
	C862	257 0512 903	CK73F1E104ZT		
	C863	254 4300 963	CE04W0J101MT(SRE)		
	C864,865	257 0512 903	CK73F1E104ZT		

	Ref.No.	Part No.	Part Name	Remarks	New
	C866-868	254 4299 964	CE04W1C470MT(SRE)		
	C869	254 4300 963	CE04W0J101MT(SRE)		
	C870	254 4299 919	CE04W1C220MT(SRE)		
	C871	254 4300 963	CE04W0J101MT(SRE)		
	C872	254 4299 919	CE04W1C220MT(SRE)		
	C873	254 4300 963	CE04W0J101MT(SRE)		
	C874	254 4299 919	CE04W1C220MT(SRE)		
	C875	257 0512 903	CK73F1E104ZT		
	C876	254 4300 963	CE04W0J101MT(SRE)		
	C877,878	257 0512 903	CK73F1E104ZT		
	C879	257 0511 904	CK73F1H103ZT		
	C880	257 0509 929	CK73B1H102KT		
	C890,891	247 2018 903	RM73B--0R0KT		
	C896,897	257 0512 903	CK73F1E104ZT		
	C898,899	254 4300 963	CE04W0J101MT(SRE)		
OTHER PARTS GROUP					
	CX031	205 0355 033	3P KR CON BASE(L)		
	CX052	205 0355 059	5P KR CON BASE(L)		
	CY102	205 0480 005	10P KR CON BASE(L)		
	FB801-816	235 0130 903	CHIP EMIFIL(11A121)		
	FB851-862	235 0130 903	CHIP EMIFIL(11A121)		
	JK851,852	204 6649 009	RGB CONNECTOR		
	L851,852	235 0070 911	INDUCTOR(220)ST		
	W801,802	414 0903 005	SCART SHIELD PLATE		
		461 0415 007	RUBBER SHEET		

EXPLODED VIEW

Parts List



PARTS LIST OF EXPLODED VIEW

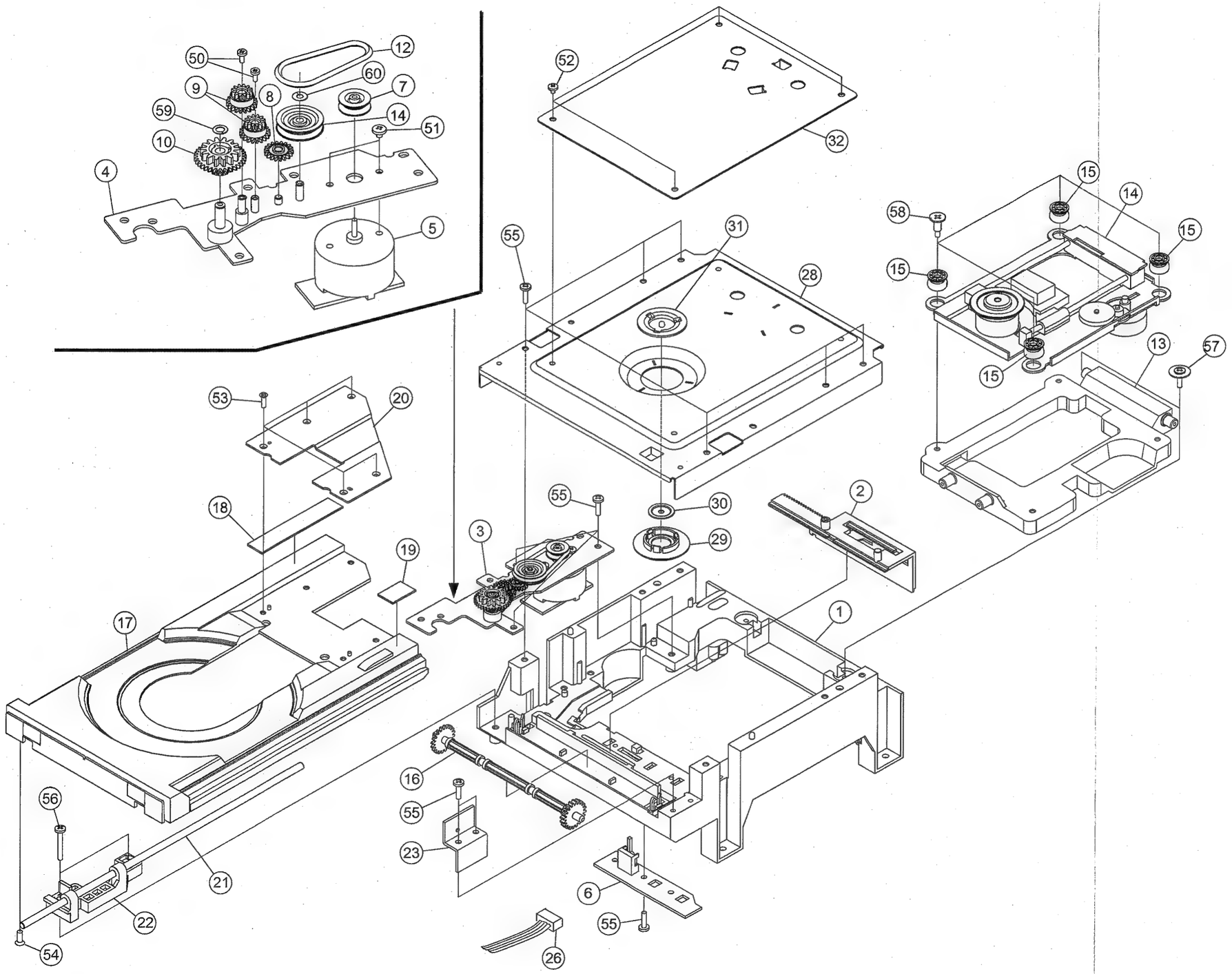
Note: The symbols in the column "Remarks" indicate the following destinations.
E3 : U.S.A. & Canada model
E2 : Europe model
JP : Japan model

	Ref.No.	Part No.	Part Name	Remarks	Q'ty	New
	1	GU-3512	MAIN PWB UNIT		1	
	2	GU-3513	AUDIO/DISP UNIT(E3)	for E3	1	
	2	GU-3513A	AUDIO/DISP UNIT(-N)	for JP	1	
	2	GU-3513B	AUDIO/DISP UNIT(E2)	for E2	1	
	2-1		AUDIO UNIT			
	2-2		DISPLAY UNIT			
	2-3		LED UNIT			
	2-4		SW UNIT			
	2-5		P.SW UNIT			
	3	GU-3514	VIDEO UNIT	for E3	1	
	3	GU-3514A	VIDEO UNIT(-N)	for JP	1	
	3	GU-3514B	VIDEO UNIT(E2)	for E2	1	
	3-1		VIDEO UNIT			
	3-2		DVI UNIT			
	3-3		JOINT UNIT			
	4	GU-3515	POWER PWB UNIT	for E3	1	
	4	GU-3515A	POWER PWB UNIT(-N)	for JP	0	
	4	GU-3515B	POWER PWB UNIT(E2)	for E2	1	
	4-1		D.POWER UNIT			
	4-2		A.POWER UNIT			
	5	GU-3517	IEEE1394 UNIT		1	
	6	1U-3426B	DSP UNIT B	for E2,JP	1	
	7	GU-3442A	SCART PWB UNIT	for E2	1	
	11	102 0665 026	TOP COVER (BK)	for E3,E2 black model	1	*
	11	102 0665 039	TOP COVER (GO)	for E2 gold model, JP	1	*
	12	104 0334 007	FOOT		4	*
	13	105 1382 006	INSIDE PLATE		1	
	14	105 1382 019	BOTTOM COVER		1	
	15	105 1403 105	TOP COVER DAMPER		1	
	16	105 1432 309	REAR PANEL(E3)BK	for E3	1	*
	16	105 1432 312	REAR PANEL(-N)GO	for JP	1	*
	16	105 1432 325	REAR PANEL(E2)GO	for E2 gold model	1	*
	16	105 1432 338	REAR PANEL(E2)BK	for E2 black model	1	*
	17	112 0918 107	SELECT KNOB ASS'Y BK	for E3,E2 black model	1	*
	17	112 0918 110	SELECT KNOB ASS'Y GO	for E2 gold model, JP	1	
	18	113 1981 107	POWER KNOB ASS'Y(BK)	for E3,E2 black model	1	*
	18	113 1981 110	POWER KNOB ASS'Y(GO)	for E2 gold model, JP	1	
	19	125 0075 020	CHUKOH TAPE	for JP	50	
	20	129 0213 004	TRANS DAMPER	for JP	1	
	21	129 0215 002	BASS RUBBER (S)	for JP	1	
	22	129 0253 048	RUBBER SHEET		2	
	25	131 0158 007	DENON BADGE	for E3,E2 black model	1	
	25	131 0158 010	DENON BADGE	for E2 gold model, JP	1	
	26	135 0067 006	DVD-A PLATE	for E3,E2 black model	1	
	26	135 0067 019	DVD-A PLATE	for E2 gold model, JP	1	
	27	135 0068 018	SACD PLATE	for E3,E2 black model	1	
	27	135 0068 021	SACD PLATE	for E2 gold model, JP	1	
	28	143 1110 005	LENS		4	
	29	143 1168 109	WINDOW		1	*
	30	143 1169 205	DISPLAY SHEET		1	*
	31	144 2833 300	FRONT PANEL(BK)	for E3	1	*
	31	144 2833 313	FRONT PANEL(GO)	for E2 gold model	1	*
	31	144 2833 326	FRONT PANEL(BK)	for E2 black model	1	*
	32	144 2854 101	DISPLAY PLATE(BK)	for E3,E2 black model	1	*
	32	144 2854 114	DISPLAY PLATE(GO)	for E2 gold model, JP	1	*
	33	146 2225 707	INNER PANEL	for E3,E2 black model	1	*
	33	146 2225 710	INNER PANEL	for E2 gold model, JP	1	*
	34	146 2282 009	LOADER PANEL	for E3,E2 black model	1	

	Ref.No.	Part No.	Part Name	Remarks	Q'ty	New
	34	146 2282 012	LOADER PANEL	for E2 gold model, JP	1	
	35	146 2336 007	POWER KNOB GUIDE(BK)	for E3,E2 black model	1	*
	35	146 2336 010	POWER KNOB GUIDE(GO)	for E2 gold model, JP	1	*
⚠	36	203 3994 000	AC INLET (3P) 100/120V	for E3,JP	1	
⚠	36	203 3995 009	AC INLET (2P) 230V	for E2	1	
⚠	37	233 6456 106	POWER TRANS(E3) 100V	for E3	1	*
⚠	37	233 0664 004	POWER TRANS(N) 120V	for JP	1	*
⚠	37	233 6457 008	POWER TRANS(E2) 230V	for E2	1	*
	38	263 1164 009	PQ018EF01SZ	IC413,414	2	
	39	263 1179 007	NJM7805FA(SS)-#4MS	IC909,914	1	
	40	263 1179 023	NJM7808FA(SS)-#4MS	IC911	1	*
	41	342 0027 000	FERRITE CORE		1	*
	42	411 2034 229	CHASSIS		1	*
	43	411 2045 001	TRANS BASE		1	
	44	412 4944 035	FRONT ANGLE		2	*
	45	412 5032 001	PWB STAY		1	*
	46	412 5057 002	L/P COVER BRACKET		1	*
	47	412 5066 019	EARTH GASKET(0.09)	for E3	9	
	48	414 0989 003	L/P COVER		1	*
	49	414 0990 005	SHIELD IEEE1394(BOT)		1	*
	50	414 0991 004	SHIELD IEEE1394(TOP)		1	*
	51	417 0651 107	HEAT PLATE		1	*
	52	461 1050 018	RUBBER PAD		4	
	53	461 1069 012	RUBBER SHEET	for JP	1	
	54	461 1131 021	RUBBER FOAM		2	
	55	461 1172 006	EMI GASKET UC-3E0504 1m	for E3	10	
	55-1	GEN 6511	GASKET SUB ASS'Y(40) 40mm	for E3	1	
	55-2	GEN 6511-1	GASKET SUB ASS'Y(30) 30mm	for E3	2	
	56	513 2065 002	E2 LASER CAUTION	for E2	1	
	57	513 3406 107	LABEL (A)	for E3	1	
	58	513 3436 009	ROM SEAL		1	
	59	513 3463 001	LABEL(LASER)	for E2	1	
	60	513 3951 005	FUSE CAUTION LABEL	for E3	1	*
	60	513 3951 018	FUSE CAUTION LABEL 230V	for E2	1	
	61	FG180-1	DVD MECHA UNIT		1	
	62	-	ACETATE CLOTH TAPE	NITTO No.156 W20 × L120	2	
	63	-	ACETATE CLOTH TAPE	NITTO No.156 W10 × L30	1	
	64	-	ACETATE CLOTH TAPE	NITTO No.156 W20 × L340	1	
	70	009 0186 015	24P FFC(0.5)		1	
	71	009 0244 009	17P FFC(1.0)	CW171	1	*
	72	009 0244 012	17P FFC(1.0)	CW173	1	*
	73	009 0244 025	17P FFC(1.0)	CW172	1	*
	74	009 0244 038	19P FFC(1.0)	CW191	1	*
	75	009 0244 041	25P FFC(1.0)	CW251	1	*
	76	009 0244 054	30P FFC(1.0)	CW301	1	*
	77	009 0244 067	33P FFC(1.0)	CW331	1	*
	78	203 0722 013	1P CONTACT ASS'Y		1	*
	79	203 2426 003	2P CONTACT ASS'Y		1	
	80	203 5293 039	3P VH CON.CORD	CW24	1	*
	81	203 5294 012	3P VH-VH CON.CORD	CW25	1	*
	82	203 5295 011	3P VH-VH CON.CORD		1	*
	83	203 6601 002	4P PH-PH CONN.CORD	CW41	1	*
	84	203 8517 068	5P PH-PH CONN.CORD		1	
	85	204 2942 014	10P PH-PH CON.CORD	CW101	1	*
	86	204 2964 005	8P PH-PH CON.CORD	CW32	1	*
	87	204 2942 027	10P PH-PH CON.CORD	for E2	1	*
	88	203 8543 003	5P PH-3P PH CON.CORD	for E2	1	*
	89	203 5296 023	3P PH-PH CON.CORD	for E2	1	*
	101	412 2404 043	PWB HOLDER (WLS-13)		3	
	102	445 0033 005	WIRE CLAMP BAND		7	
	103	445 0048 016	CORD HOLDER (L50)		4	

	Ref.No.	Part No.	Part Name	Remarks	Q'ty	New
	104	449 0033 052	LOCKING CARD SPACER		1	
	105	449 0077 018	CARD SPACER		2	
	106	449 0077 021	CARD SPACER		2	
	107	449 0210 008	PWB SPACER(LCBS-30)	CW81	1	*
SCREW						
	111	471 2305 015	3X10 CFS		2	
	112	471 3304 015	3X8 CBS-Z	for E3	10	
	112	471 3304 015	3X8 CBS-Z	for E2	8	
	113	471 3304 028	3X8 CBS-B	for JP	4	
	114	473 7002 018	3X8 CBTS (S)-Z	for E3	41	
	114	473 7002 018	3X8 CBTS (S)-Z	for E2	36	
	115	473 7003 017	3X8 CFTS (S)-B		2	
	116	473 7004 029	4X10 CBTS (S)-Z	for JP	2	
	117	473 7004 087	4X14 CBTS(S)-B	for E3, E2	2	
	118	473 7005 015	3X12 CBTS (S)-Z		4	
	119	473 7015 005	3X6 CBTS(S)-B	for E3	26	
	119	473 7015 005	3X6 CBTS(S)-B	for E2, JP	28	
	120	473 7500 044	3X8 CBTS (P)-B		18	
	121	473 7508 017	3X10 CBTS (P)-B		4	
	122	477 0064 123	FIXING SCREW	for E3	9	
	122	477 0064 123	FIXING SCREW	for E2	13	
	122	477 0064 123	FIXING SCREW	for JP	10	
	123	477 0263 005	3P.SWELLING SCREW	for E3, E2 black model	8	
	123	477 0263 018	3P.SWELLING SCREW	for E2 gold model, JP	8	
	124	-	M3 NUT FOR RS-232C		2	
	125	-	M3 NUT FOR DVI-D		2	

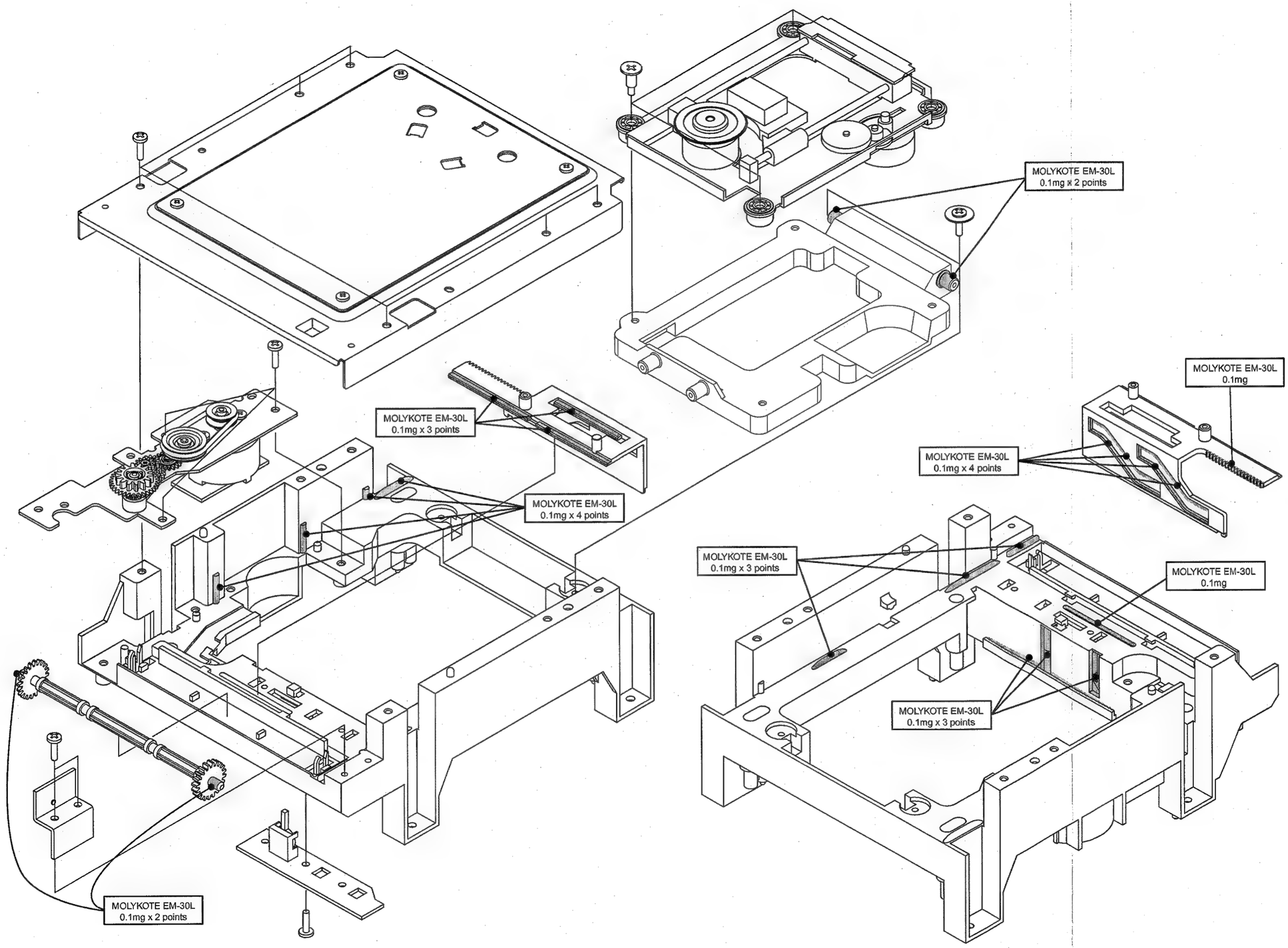
EXPLODED VIEW OF DVD MECHANISM



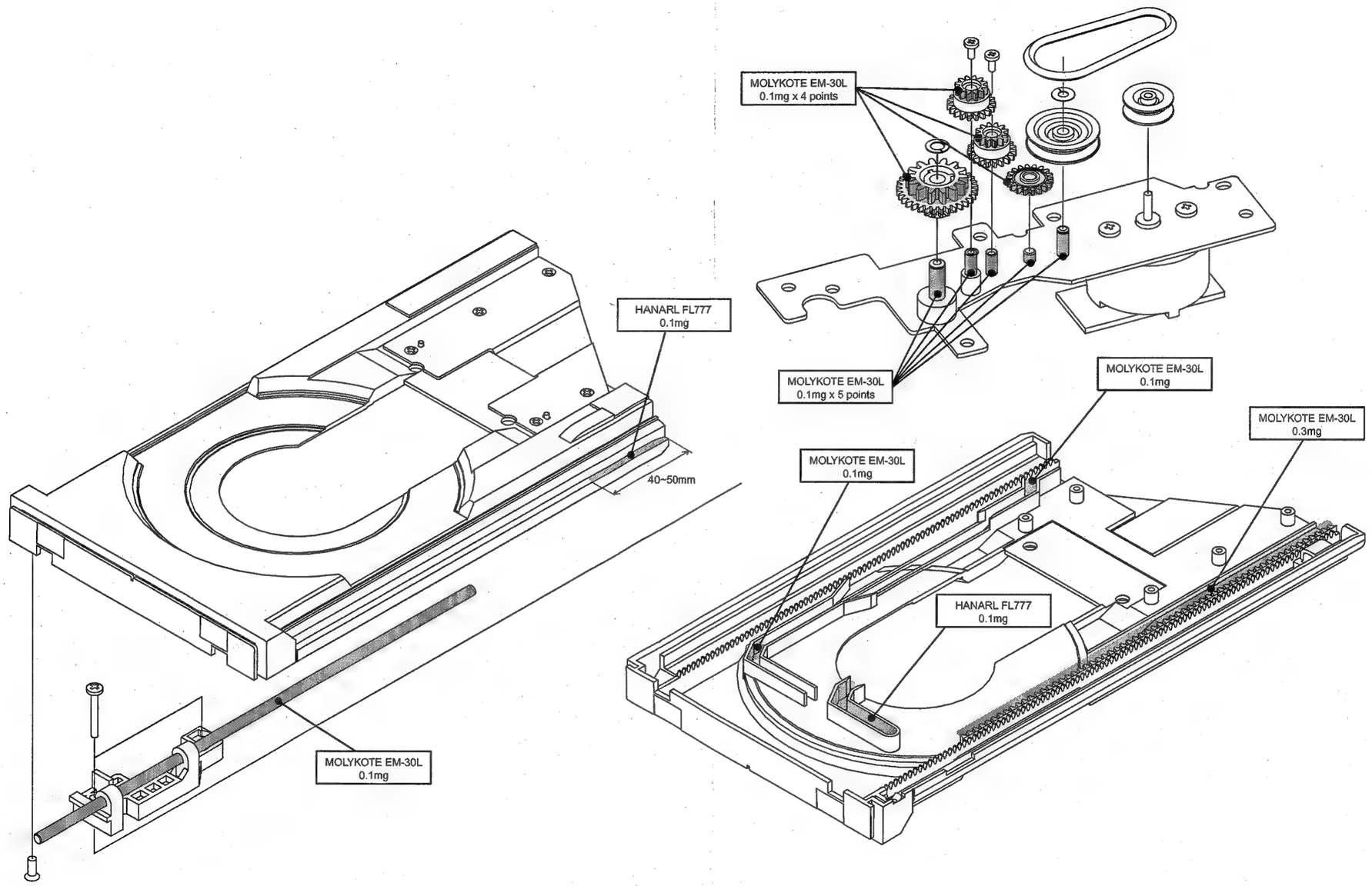
PARTS LIST OF DVD MWCHANISM(FG180-1)

	Ref. No.	Part No.	Part Name	Remarks	Q'ty
	1	411 1988 101	Mecha chassis		1
	2	431 0426 503	Plate gear		1
	3	9KA 2A40 3D	Gear base sub Ass'y		1
	4	441 1952 109	Gear base Ass'y		1
	5	9KM 01T1 32	LD Motor		1
	6-1	9KA 85P0 05	Detector SW P.W.B.		1
	6-2	9KA 85G0 27	2P Connector wire		1
	6-3	9KA 82G3 08	2P Connector		1
	6-4	9KS 01W1 48	Detector SW		1
	7	421 0772 108	Motor pully		1
	8	424 0269 209	Gear C		1
	9	424 0268 200	Gear B		2
	10	424 0267 201	Gear A		1
	11	424 0270 104	Pulley gear		1
	12	423 0077 100	Belt		1
	13	446 0063 104	Mecha frame		1
	14A	9KC 2A50 6A	TRAV. Mecha Ass'y	with FEED MOTOR	1
	14B	9KC 2A07 4B	TRAV. Mecha Ass'y	without FEED MOTOR	1
	15	9KC 2G08 3A	Damper-IDLE		4
	16	424 0246 109	Loader gear		1
	17	431 0427 405	Loader		1
	18	461 1131 005	Rubber form		1
	19	461 1131 018	Rubber form		1
	20	412 4817 104	Loader bracket		1
	21	431 0384 001	Slide shaft		1
	22	431 0428 006	Holder		1
	23	412 4818 006	Bearing plate Ass'y		1
	26	203 8517 068	5P PH-PH Connector cord		1
	28	412 4820 201	Clamp base		1
	29	9KA 7G20 3B	Clamper L		1
	30	9KA 7P08 5A	Clamper T		1
	31	9KA 7G20 2D	Clamper H		1
	32	403 0061 002	Clamp base damper		1
	34	513 3436 009	ROM seal		1
	SCREWS				
	50	471 9057 007	Special screw M1.7		2
	51	9KM 01T1 32	Screw 2.6x2.5 CBS-NI		2
	52	471 3813 001	Screw 2.6x4 CBS-B		4
	53	9KH 26P0 08	Screw 2.6x8 CFTS(P)		5
	54	473 7511 004	Screw 3x10 CFTS (P)-Z		1
	55	473 7508 017	Screw 3x10 CBTS (P)-B		12
	56	473 7508 046	Screw 3x16 CBTS (P)-B		2
	57	477 0262 006	Special screw		2
	58	9KC 1H01 1A	SCW-Damper		4
	59	9KP 36C6 25	Slit washer		1
	60	9KP 26C6 25	Slit washer		1

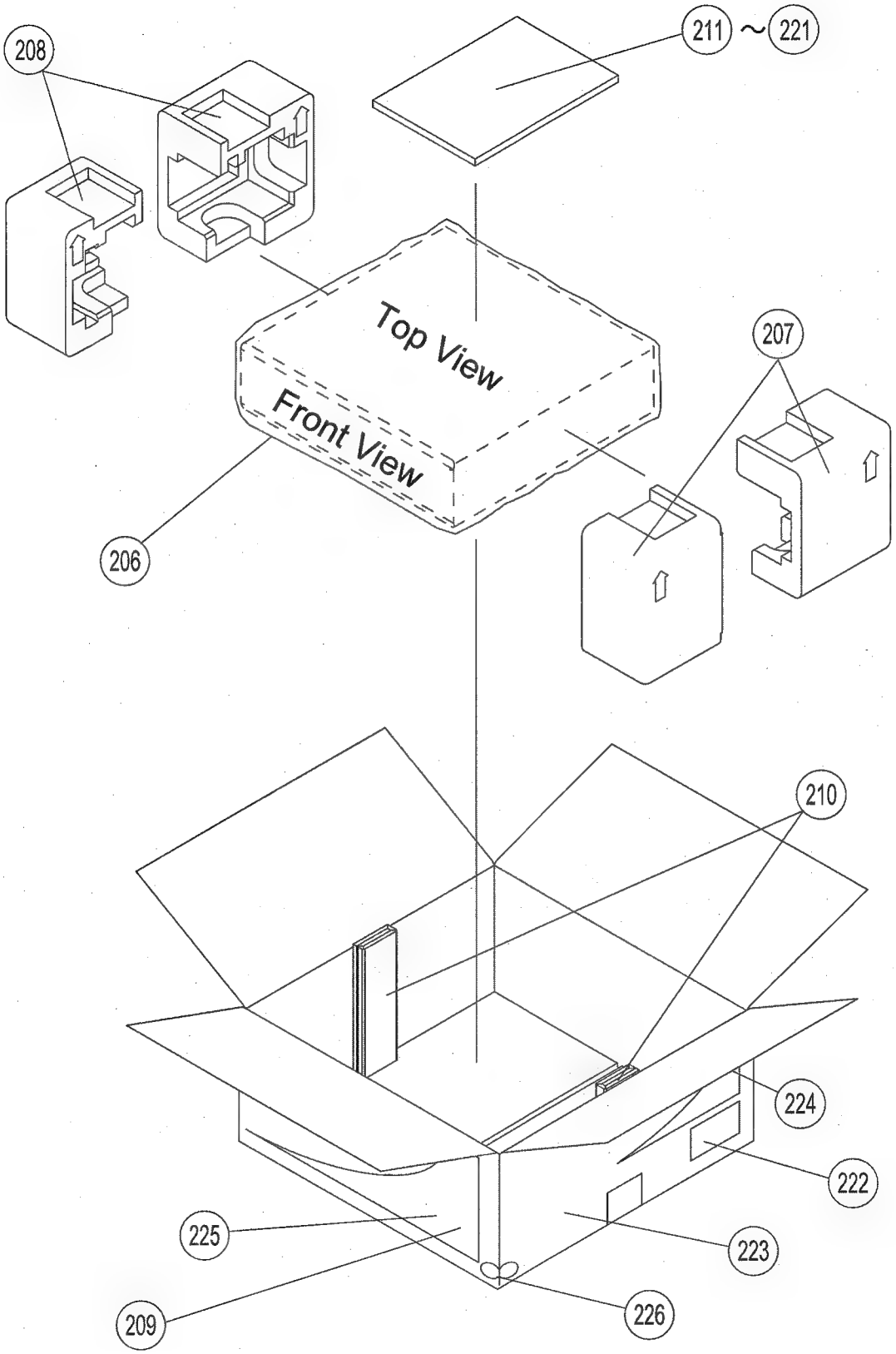
POINTS OF GREASING (1/2)



POINTS OF GREASING (2/2)



PACKING VIEW

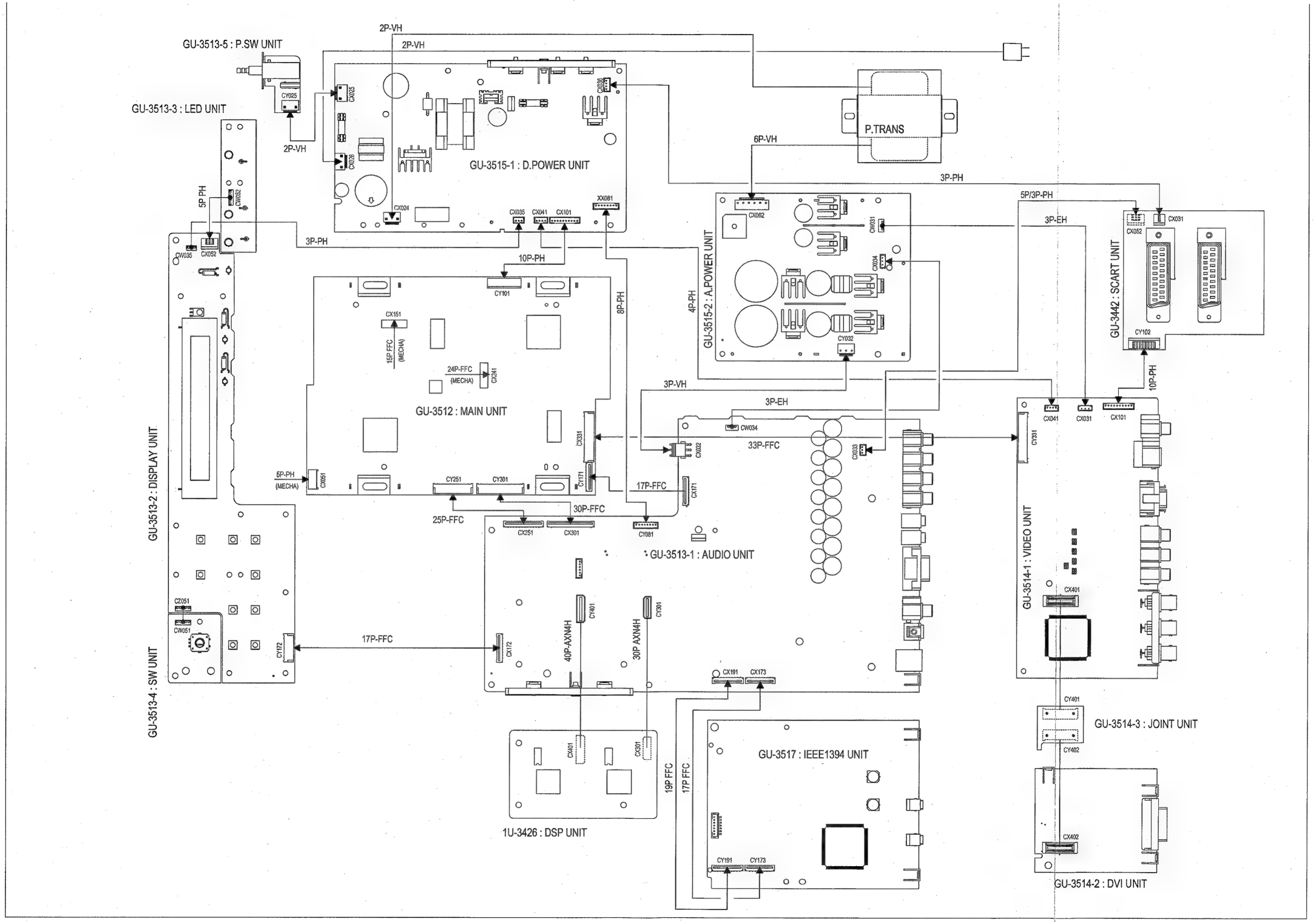


PARTS LIST OF PACKING & ACCESSORIES

Note: The symbols in the column "Remarks" indicate the following destinations.
E3 : U.S.A. & Canada model
E2 : Europe model
JP : Japan model

	Ref.No.	Part No.	Part Name	Remarks	Q'ty	New
	200	513 3910 004	MADE IN CHINA LABEL		1	*
	201	GEN6038	S.NO.SHEET SUB ASS'Y		1	
	202	113 1945 004	RJ45 DUST COVER		1	
	203	513 3961 008	SECOND EDITION SEAL		1	
	204	PM07A01	MANUFAC.DATE SUB ASS		1	
	205	GEN6295	MANUFAC.(J)SUB ASS'Y	for JP	1	
	212	515 0944 008	WARRANTY (HOME)	for E3	1	
	213	511 4040 003	INST.MANUAL(E3)	for E3	1	*
	213	511 4042 001	INST.MANUAL(E2)	for E2	1	*
	213	511 4041 002	INST.MANUAL(-N)	for JP	1	*
	214	515 0921 209	S.S.LIST(EX)		1	
⚠	215	206 2202 006	AC CORD SET (E3)	for E3	1	
⚠	215	206 2203 005	AC CORD SET (E2)	for E2	1	
⚠	215	206 2141 002	AC CORD W/CON&PLUG	for JP	1	
	216	203 2405 008	2P PIN CORD		1	
	217	203 0701 005	1P PIN CORD(VIDEO)		1	
	218	204 2953 003	8P MODULAR CABLE		1	*
	219	203 6597 006	4P IEEE1394 CABLE		1	*
	220	399 0902 008	RC-962		1	*
	221	394 0051 006	BATTERY(UM-3)ASS'Y		1	
	222	GEN0225	CONT.CARD(L)SUB ASSY		1	
	223	GEN5854	GUARANTEE(S)SUB ASSY	for JP (2 years)	1	
	224	517 1413 055	UPC LABEL	for E3	1	*
	224	517 1484 000	E2 POS LABEL	for E2 black model	1	*
	224	517 1476 092	E2 POS LABEL	for E2 gold model	1	*
	224	517 1414 096	POS LABEL	for JP	1	*
	225	GEN1045	S.NO.SHEET SUB ASS'Y	for JP	1	
	226	513 9111 001	COLOR LABEL (GOLD)	for E2 gold model	2	
	206	505 0131 076	CABINET COVER		1	
	207	503 1462 007	CUSHION (R)		1	*
	208	503 1463 006	CUSHION (L)		1	*
	209	501 2239 039	CARTON CASE(E3)	for E3	1	*
	209	501 2239 042	CARTON CASE(E2)	for E2	1	*
	209	501 2239 013	CARTON CASE(-N)	for JP	1	*
	210	509 0179 001	SIDE SUPPORT BOX		2	*
	211	505 0038 043	POLY COVER		1	

WIRING DIAGRAM



MEASURING METHOD AND WAVEFORMS

To check the waveforms on the Main P.W.B., the GND (–) probe of the oscilloscope to "Vref" point.
(Except for Inner SW, TRVSW)

NOTES

Measuring Disc: DVD/DVDT-S01 or TDV-520A
CD/TCD-784

(It is better to use wires for extending between the probe and test points.)

- When watching the HF waveform, use the extending wire as short as possible.
- When HF waveform is noisy or cannot discriminate the eye-pattern, replace the Traverse Unit after measuring the Iop.
- ① ~ ⑰ points have the certain test points shown below.

各部の波形と測定方法

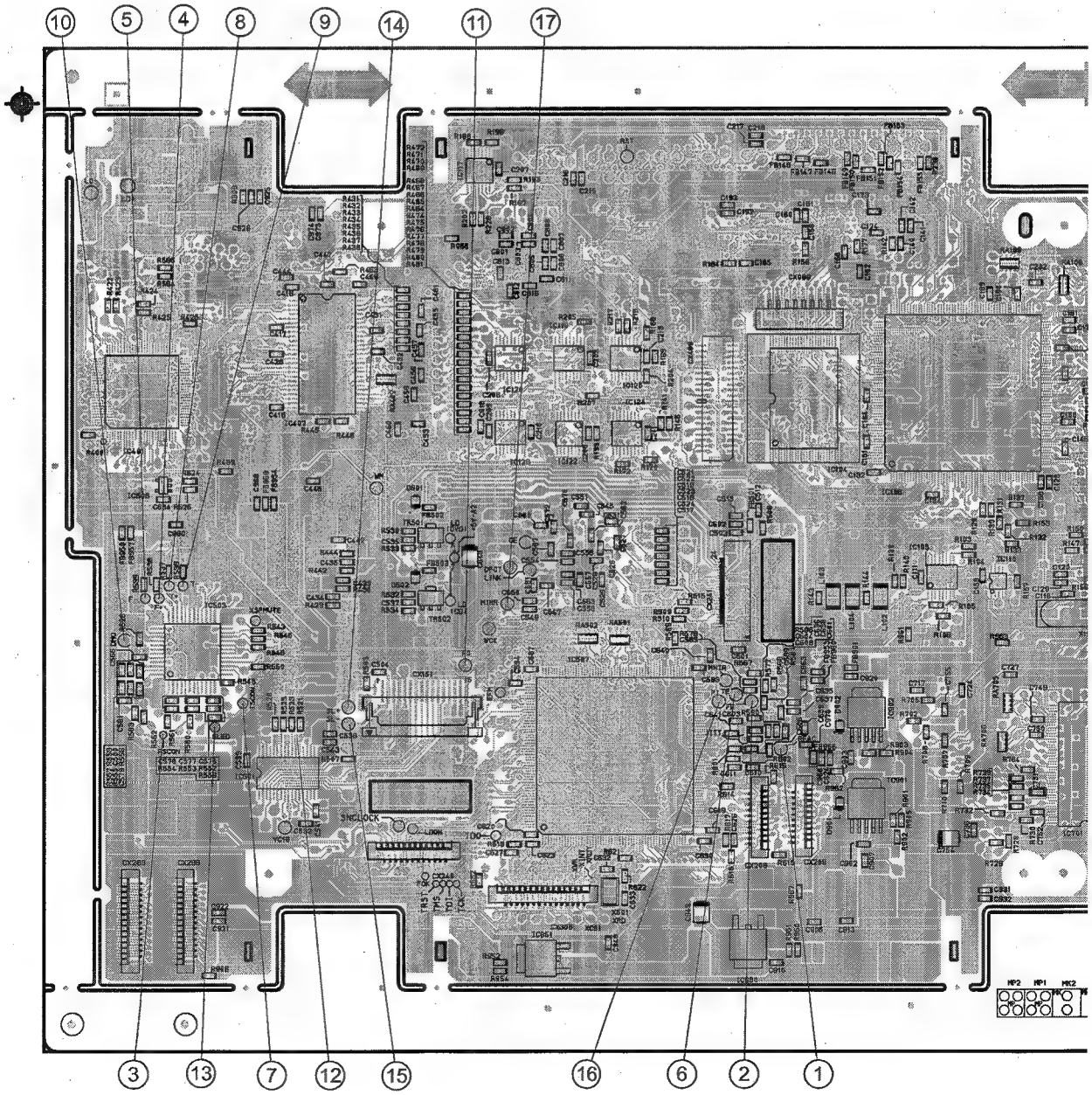
メイン基板の波形チェックを行うためにはオシロスコープの GND(–) プローブを "Vref" ポイントに接続します。

注 意

測定ディスク： DVD/DVDT-S01 or TDV-520A
CD/TCD-784

(テストポイントとプローブ間に延長ワイヤを使用するのがより良い方法です。)

- ＨＦ 波形を観測する場合、できるだけ短い延長ワイヤを使用してください。
- ＨＦ 波形がノイズで不明瞭、またはアイパターンが識別不能の場合は Iop 測定後にトラバースユニットを交換してください。
- ポイント①～⑰は、下図のように特定テストポイント付きです。

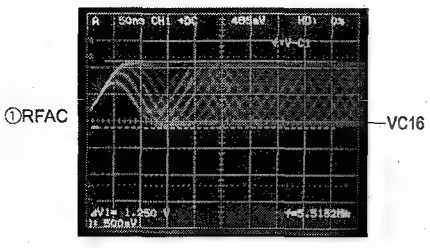


GU-3512 Main P.W.B. Unit Foil Side

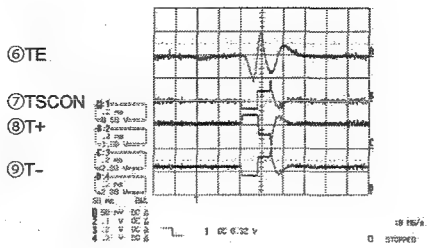
WAVEFORMS

● GU-3512 MAIN P.W.B.

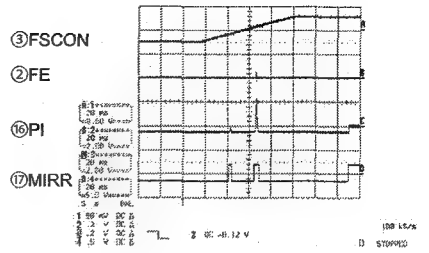
DVD PLAY Disc: TDV-520A



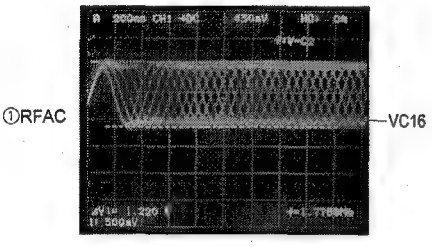
CD PLAY



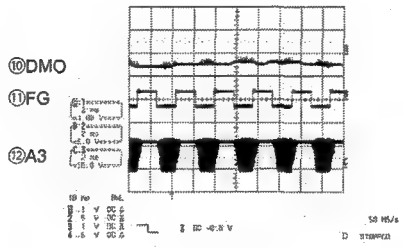
DISC DETECT (CD)



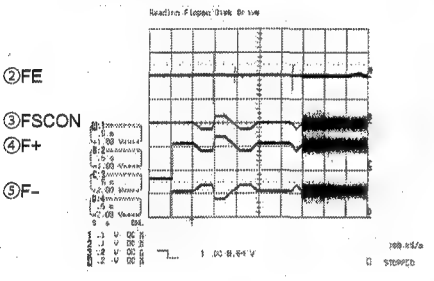
CD PLAY Disc: TCD-784



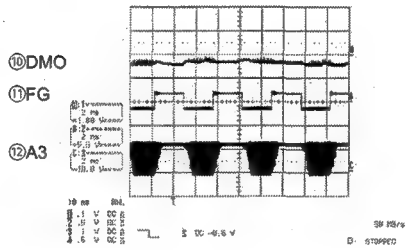
DVD PLAY (INNER)



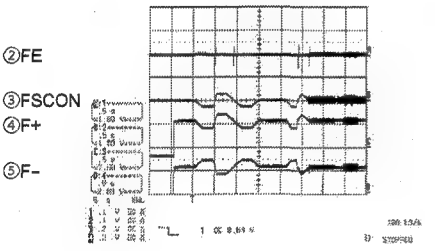
DVD LOADING ⟶ PLAY



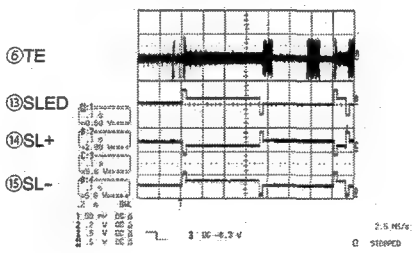
CD PLAY (INNER)



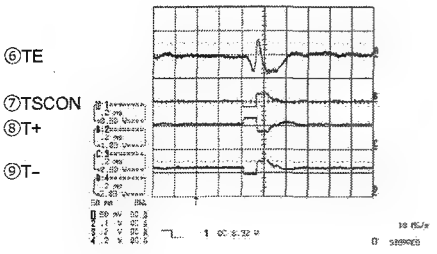
CD LOADING ⟶ PLAY



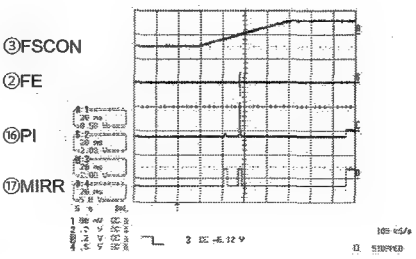
SEARCH TO OUTER CHAPTER (INNER⟶ OUTER)



DVD PLAY

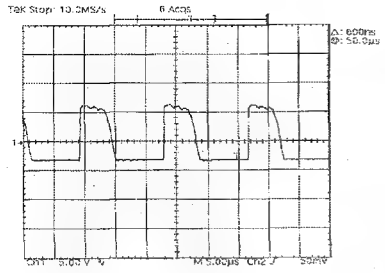


DISC DETECT (DVD)

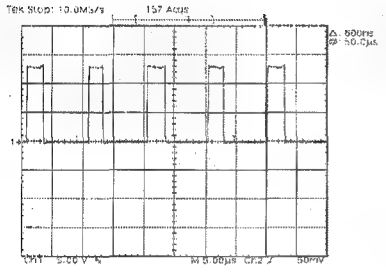


● GU-3515 POWER P.W.B.

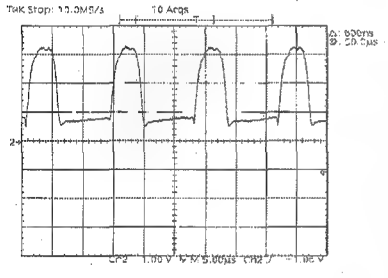
A



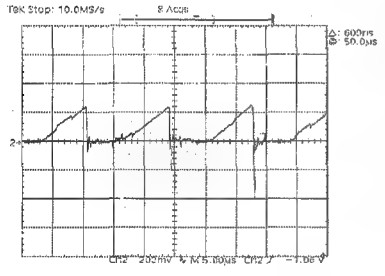
B



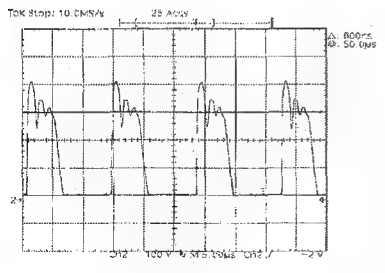
C



D

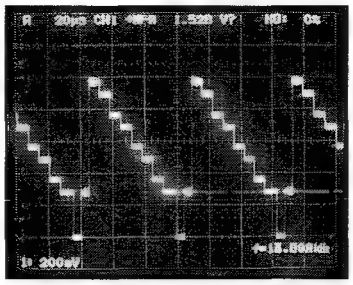


E

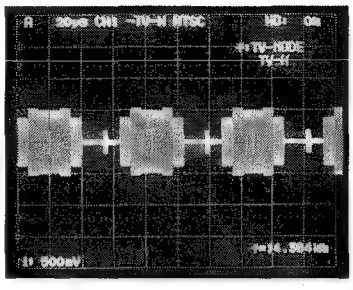


● GU-3514-1 VIDEO P.W.B.

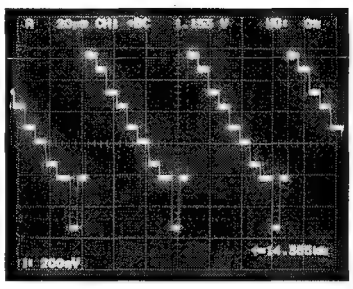
V1



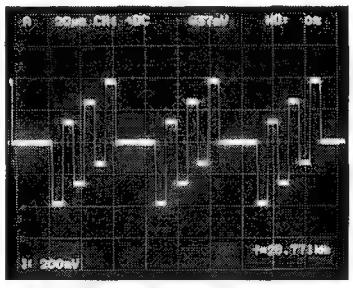
V2



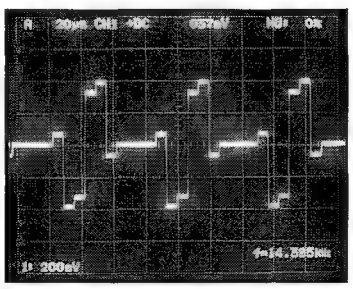
V3



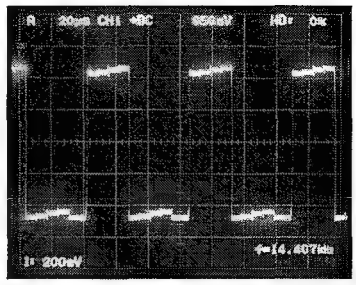
V4



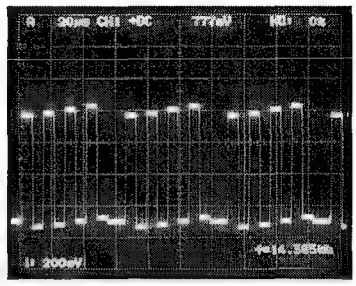
V5



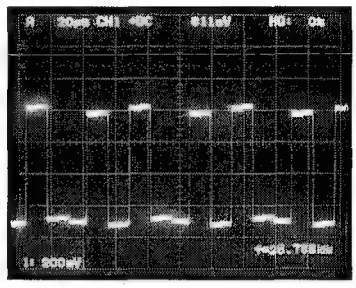
V6



V7



V8



NOTE FOR SCHEMATIC DIAGRAM

1. WARNING:

Parts marked with this symbol ⚠ have critical characteristics.
Use ONLY replacement parts recommended by the manufacturer.

2. CAUTION:

Before returning the unit to the customer, make sure you make either (1) a leakage current check or (2) a line to chassis resistance check. If the leakage current exceeds 0.5 milliamps, or if the resistance from chassis to either side of the power cord is less than 460 kohms, the unit is defective.

3. WARNING:

DO NOT return the unit to the customer until the problem is located and corrected.

4. NOTICE:

ALL RESISTANCE VALUES IN OHM. k=1,000 OHM
M=1,000,000 OHM
ALL CAPACITANCE VALUES IN MICRO FARAD.
P=MICRO-MICRO FARAD
EACH VOLTAGE AND CURRENT ARE MEASURED AT NO SIGNAL INPUT CONDITION.
CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

SIGNAL LINE

配線図について

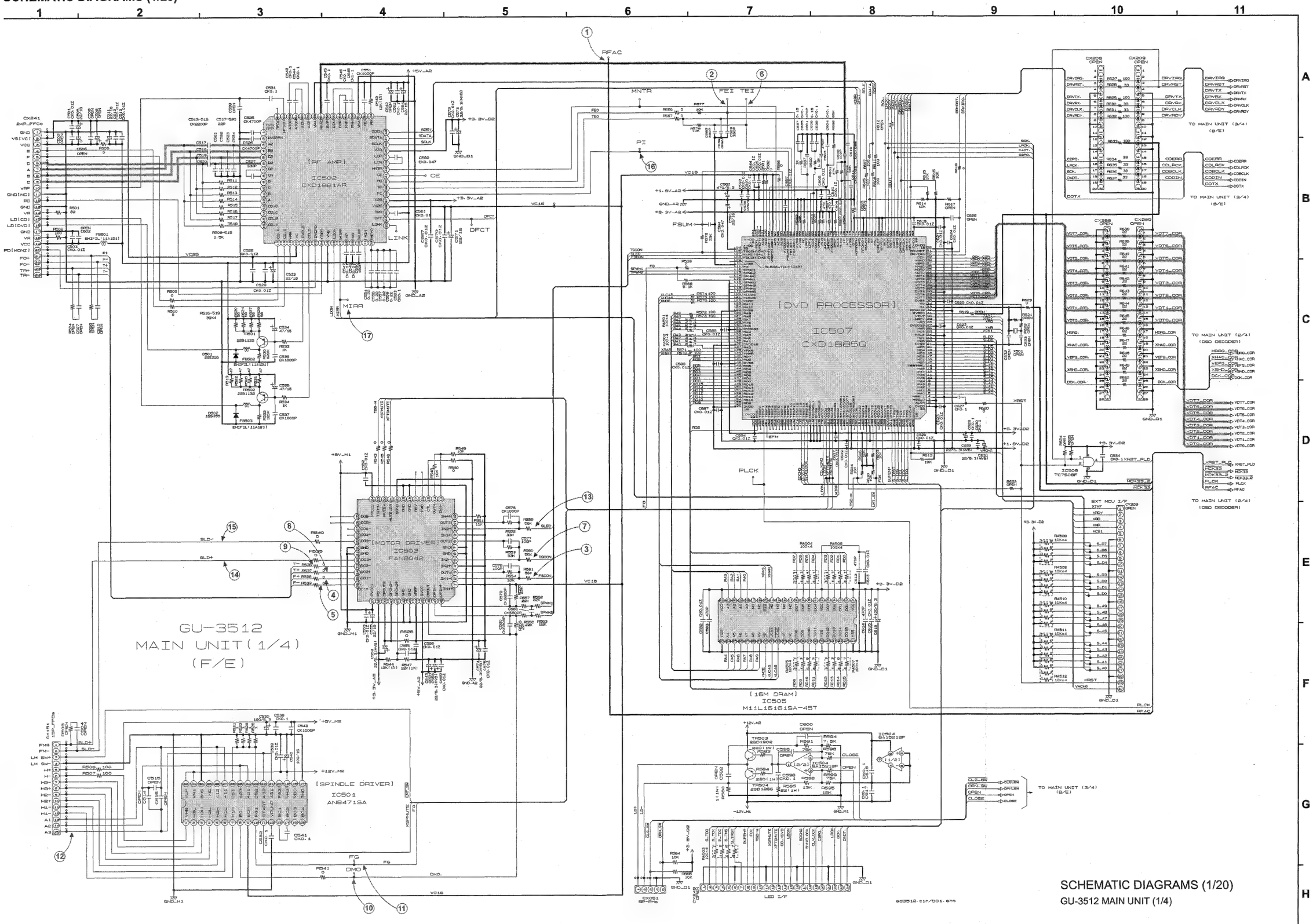
⚠ 印の部品は安全を維持するために重要な部品です。
従って交換時は必ず指定の部品を使用してください。

注)

1. 指定なき抵抗値は Ω、k は kΩ、M は MΩ を示す。
2. 指定なきコンデンサーの値は μF、p は pF を示す。
3. 各部の電圧は無信号の値を示す。
4. この配線図は基本配線図です。改良等のため変更することがありますのでご了承ください。

SIGNAL LINE

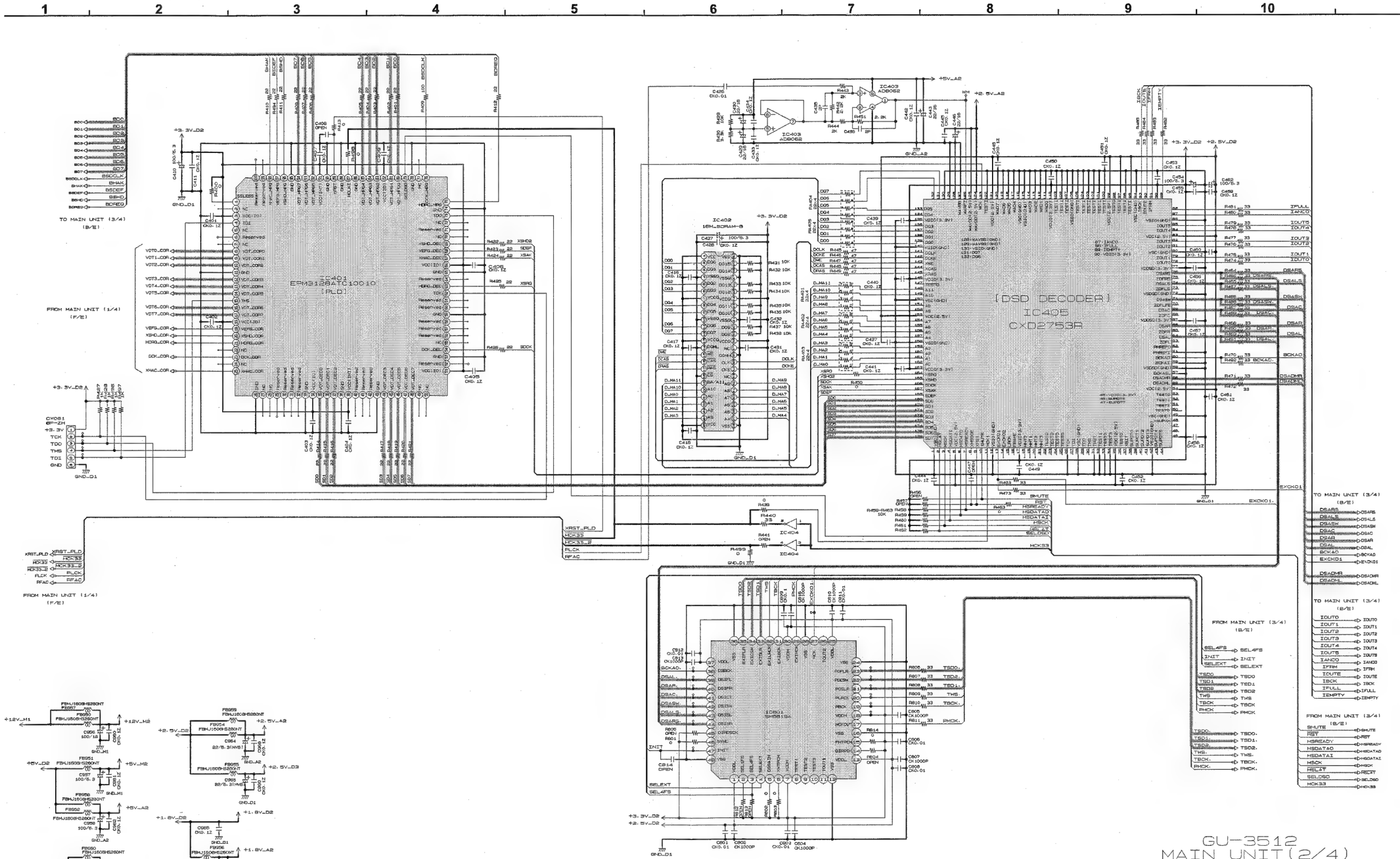
SCHEMATIC DIAGRAMS (1/20)



SCHEMATIC DIAGRAMS (1/20)

GU-3512 MAIN UNIT (1/4)

(For Japan model)



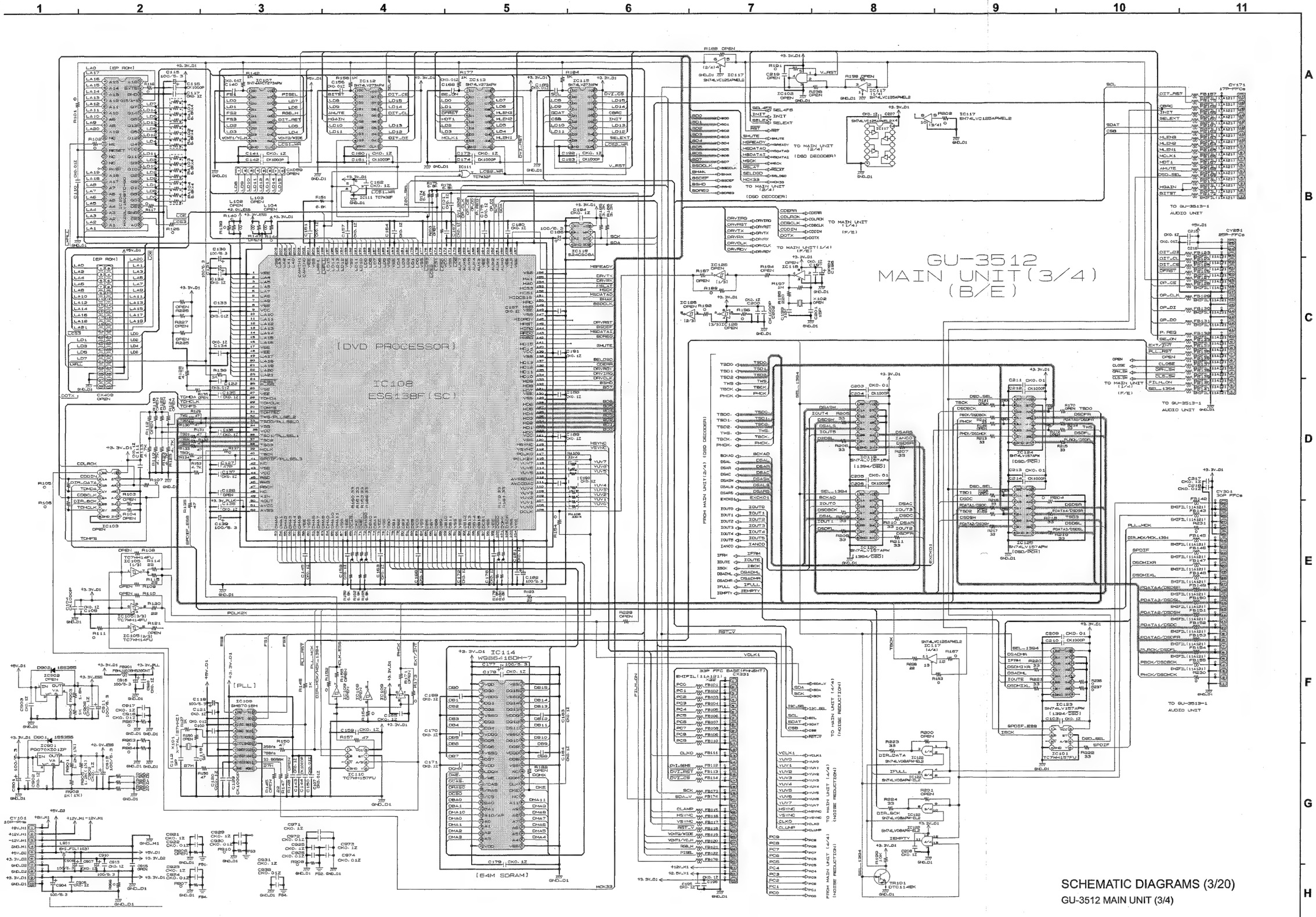
GU-3512
MAIN UNIT(2/4)
(DSD DECODER)

SCHEMATIC DIAGRAMS (2/20)

GU-3512 MAIN UNIT (2/4)

(For Japan model)

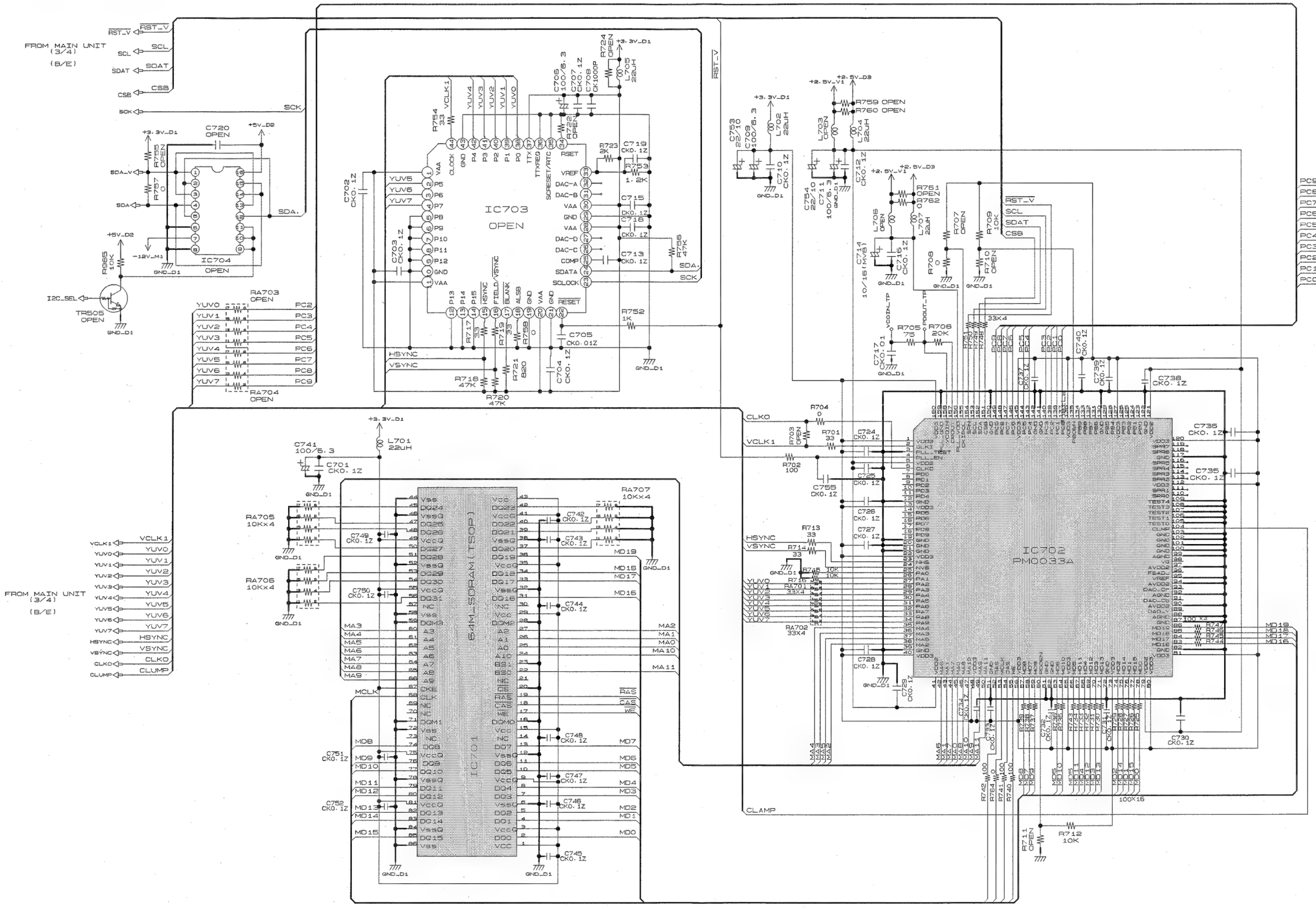
SCHEMATIC DIAGRAMS (3/20)



SCHEMATIC DIAGRAMS (3/20)

GU-3512 MAIN UNIT (3/4)

(For Japan model)



GU-3512
MAIN UNIT(4/4)
(NOISE REDUCTION)

SCHEMATIC DIAGRAMS (4/20)

GU-3512 MAIN UNIT (4/4)

(For Japan model)

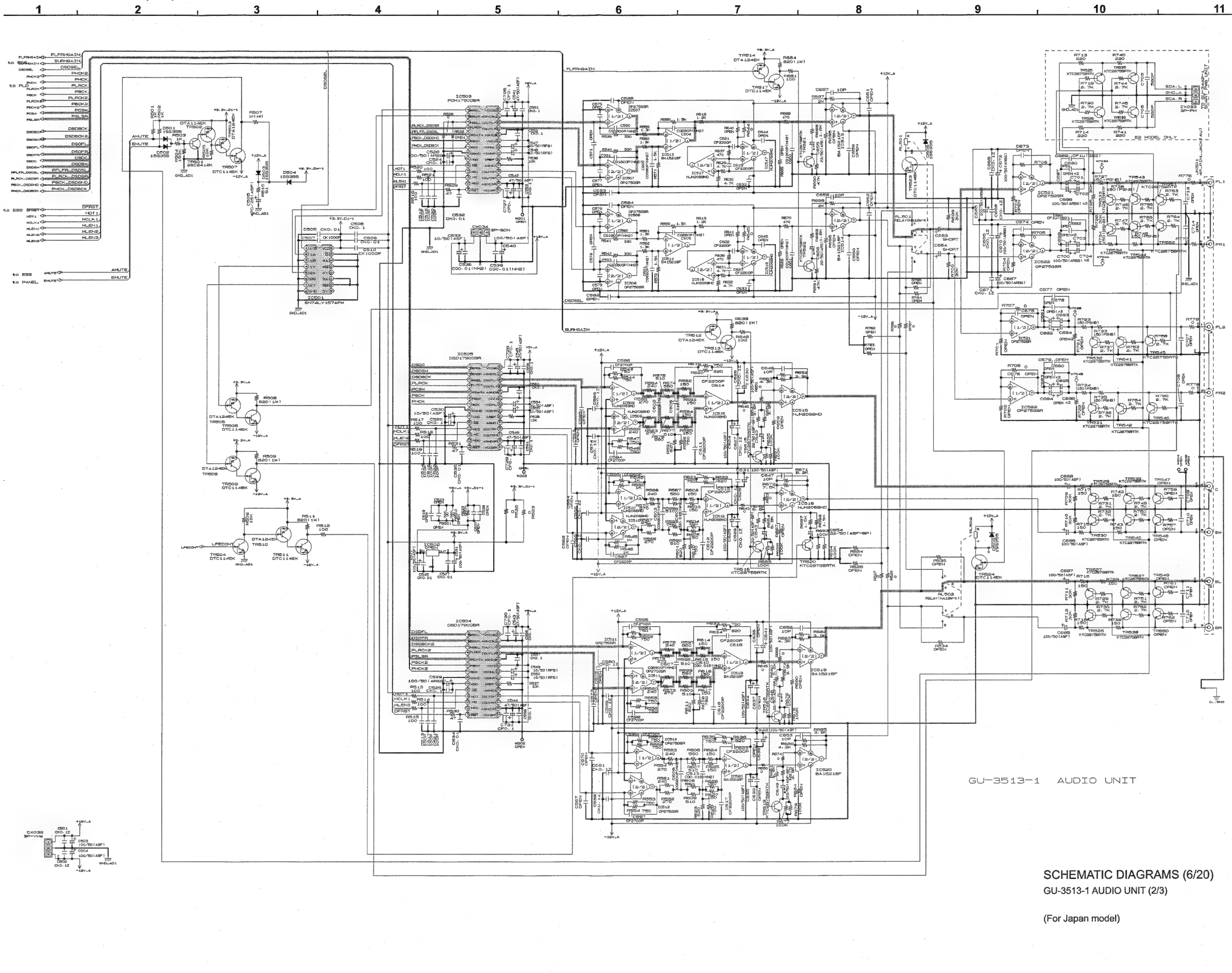
GU-3513-1
AUDIO UNIT

SCHEMATIC DIAGRAMS (5/20)

GU-3513 AUDIO UNIT (1/3)

(For Japan model)

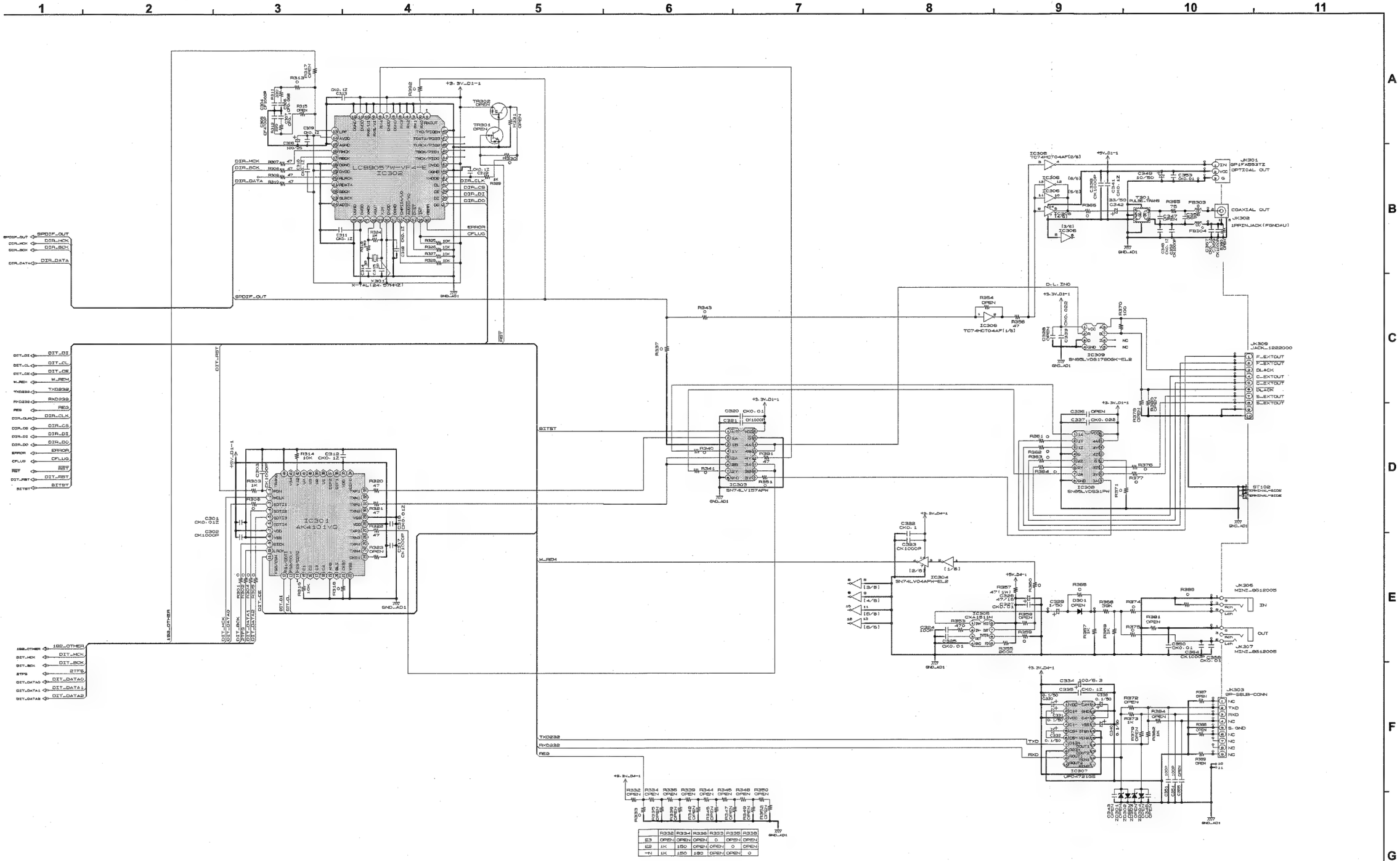
SCHEMATIC DIAGRAMS (6/20)



SCHEMATIC DIAGRAMS (6/20)

GU-3513-1 AUDIO UNIT (2/3)

(For Japan model)



	R332	R334	R336	R333	R335	R338
E3	OPEN	OPEN	OPEN	0	OPEN	OPEN
E2	1K	150	OPEN	OPEN	0	OPEN
-N	1K	150	180	OPEN	OPEN	0

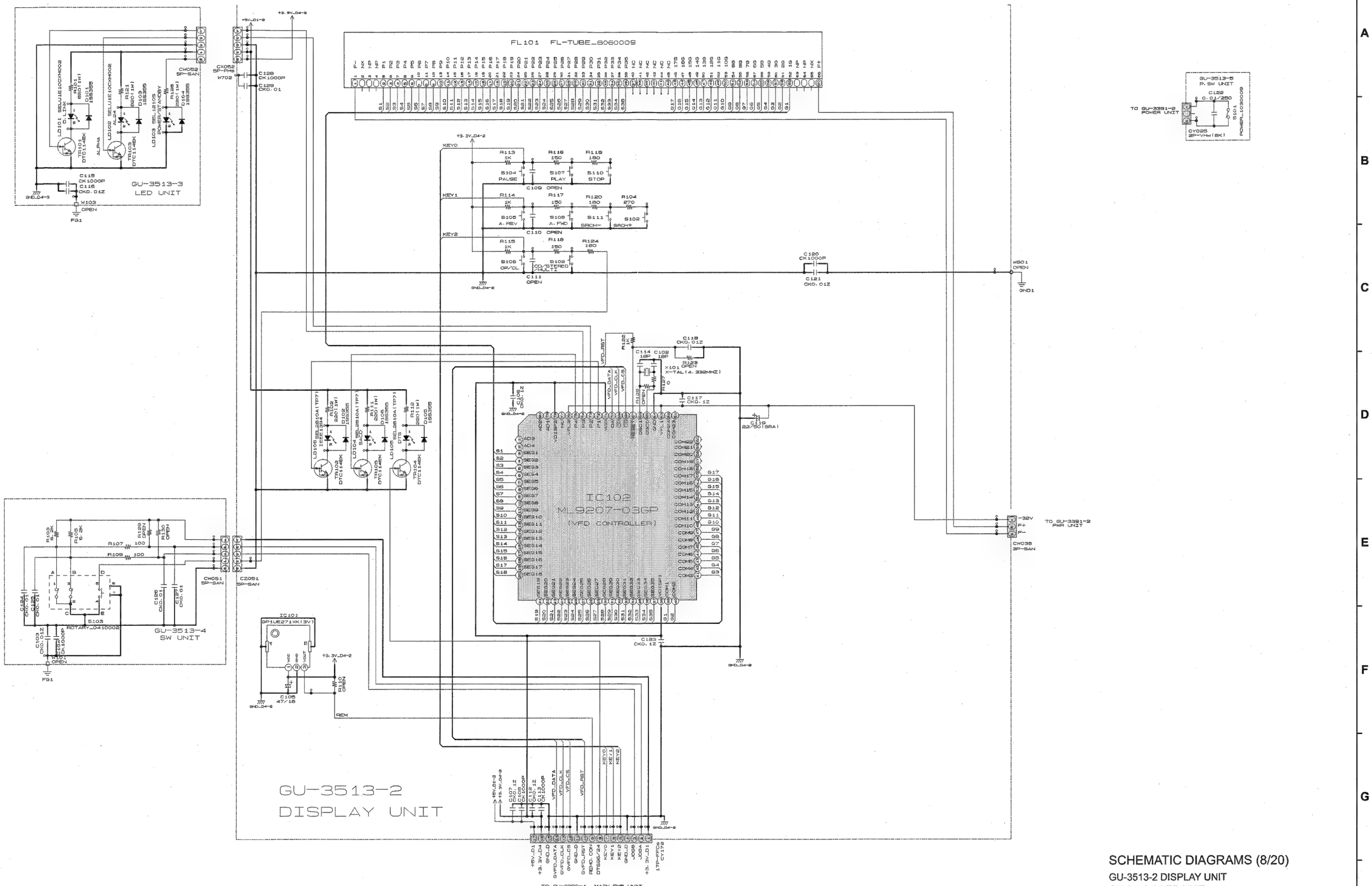
GU-3513-1 AUDIO UNIT

SCHEMATIC DIAGRAMS (7/20)

GU-3513-1 AUDIO UNIT (3/3)

(For Japan model)

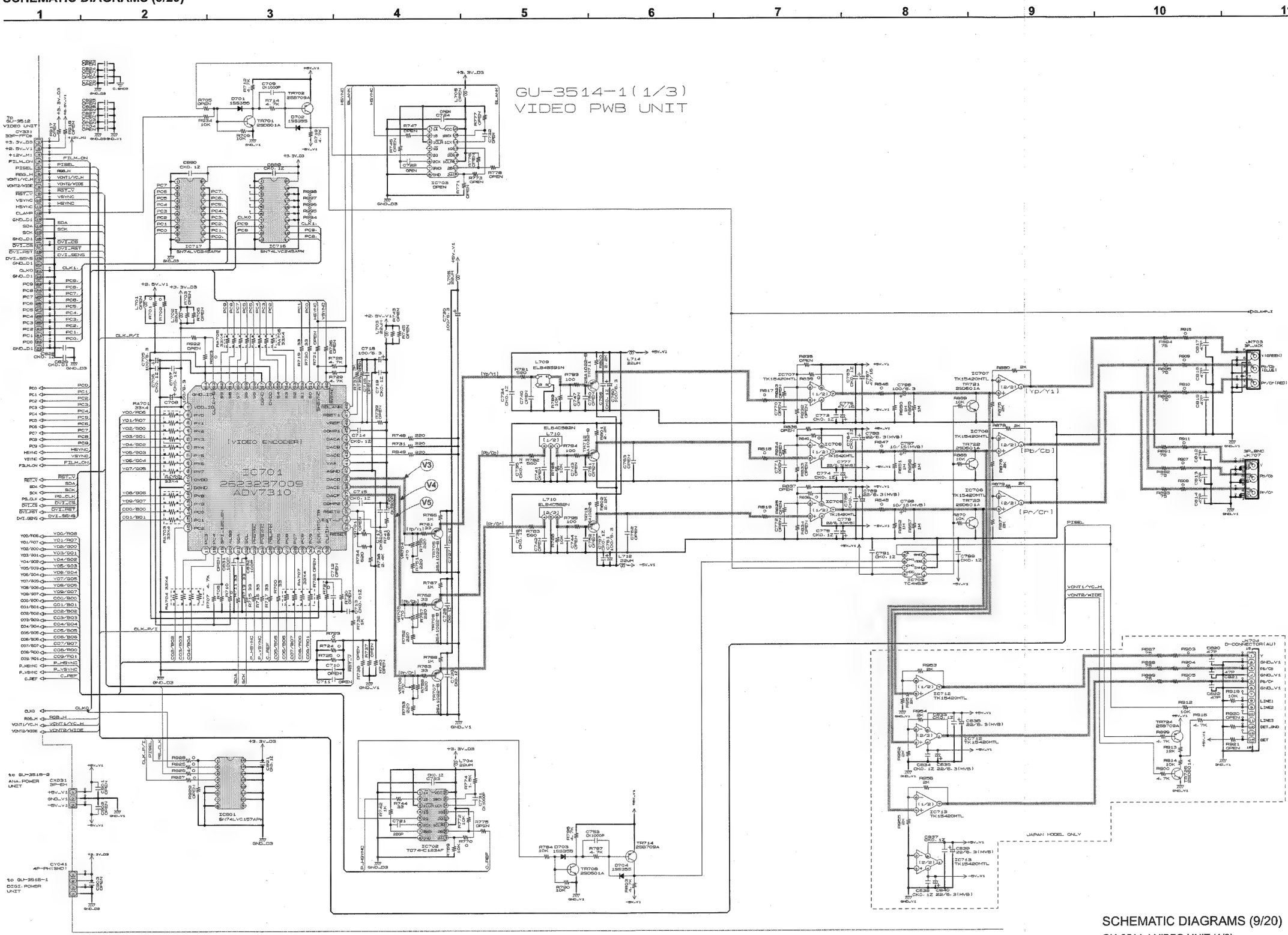
SCHEMATIC DIAGRAMS (8/20)



SCHEMATIC DIAGRAMS (8/20)

GU-3513-2 DISPLAY UNIT
GU-3513-3 LED UNIT
GU-3513-4 SW UNIT
GU-3513-5 P.SW UNIT
(For Japan model)

GU-3514-1(1/3)
VIDEO PWB UNIT



SCHEMATIC DIAGRAMS (9/20)

GU-3514-1 VIDEO UNIT (1/3)

(For Japan model)

GU-3514-1(2/3)
VIDEO PWB UNIT

E2 MODEL ONLY

to GU-3442
SCART PWB UNIT

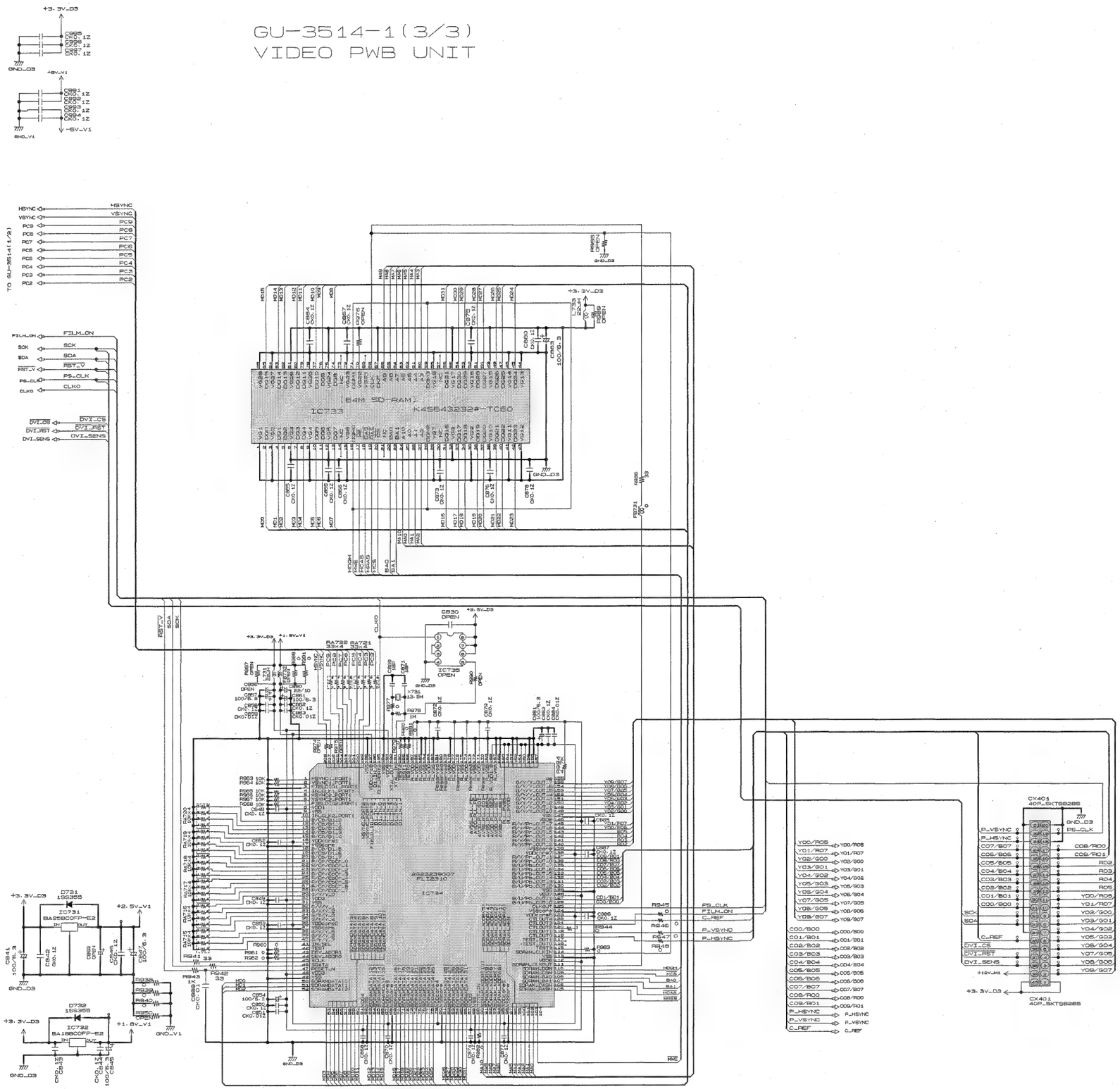
[VIDEO ENCODER]
IC601
2623237009
ADV7310

	YC-H	RGB-H
V. OUT	L	L
Y/C OUT	H	L
RGB OUT	L	H

SCHEMATIC DIAGRAMS (10/20)
GU-3514-1 VIDEO UNIT (2/3)

(For Japan model)

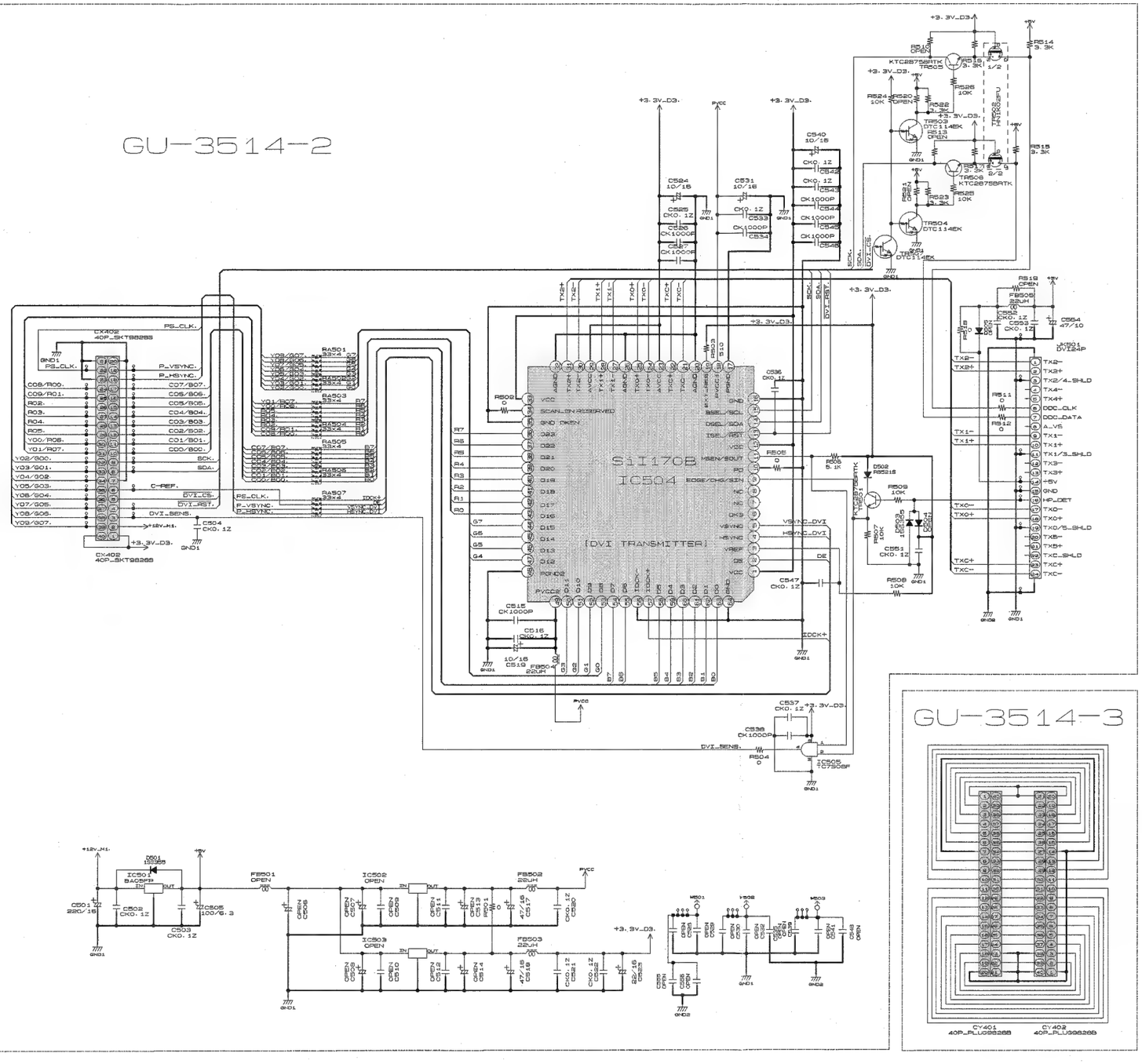
GU-3514-1(3/3)
VIDEO PWB UNIT



SCHEMATIC DIAGRAMS (11/20)
GU-3514-1 VIDEO UNIT (3/3)

(For Japan model)

GU-3514-2



GU-3514-3

SCHEMATIC DIAGRAMS (12/20)

GU-3514-2 DVI UNIT
GU-3514-3 JOINT UNIT

(For Japan model)

	DVD5900KE3	DVDA11 -N	DVDA11 **E2
C895	2200P(250V)KX	OPEN	1000P(250V)KX
C908	100/400(KMG)	100/400(KMG)	47/400(KMG)
C961	CK1000P	OPEN	CK1000P
C963	CKO.01Z	OPEN	CKO.01Z
C964	CKO.1Z	OPEN	CKO.1Z
C983	OPEN	CF1u(GSG)	OPEN
C984	OPEN	CF1u(GSG)	OPEN
C989	CKO.01Z	OPEN	CKO.01Z
C991	CKO.1Z	OPEN	CKO.1Z
C992	CKO.1Z	OPEN	CKO.1Z
C995	10/50(ASF)	100/50(RFS)	10/50(ASF)
C996	100/50(ASF)	100/50(RFS)	100/50(ASF)
CX035	OPEN	OPEN	3P-PH(WHT)
F901	1.6A(0237016)	1.6A(0237016)	1A(0218001)
F902	2.0A(0237022)	2.0A(0237002)	2A(0218002)
RS01	68K(2W)	68K(2W)	220K(2W)
ST903	OPEN	OPEN	ST-LE-PIN
AS901	OSH-2430	OSH-2430	OSH-2440

GU-3515-1
DIGITAL_POWER_UNIT

	PART. No.
DVD5900KE3	233 6456 106
DVDA11 **E2	233 6457 008
DVDA11 -N	233 0664 004

GU-3515-2 ANALOG POWER UNIT

SCHEMATIC DIAGRAMS (13/20)

GU-3515-1 DIGITAL POWER UNIT
GU-3515-2 ANALOG POWER UNIT

(For Japan model)

GU-3517
IEEE1394_UNIT

IC111
TSB41AB2

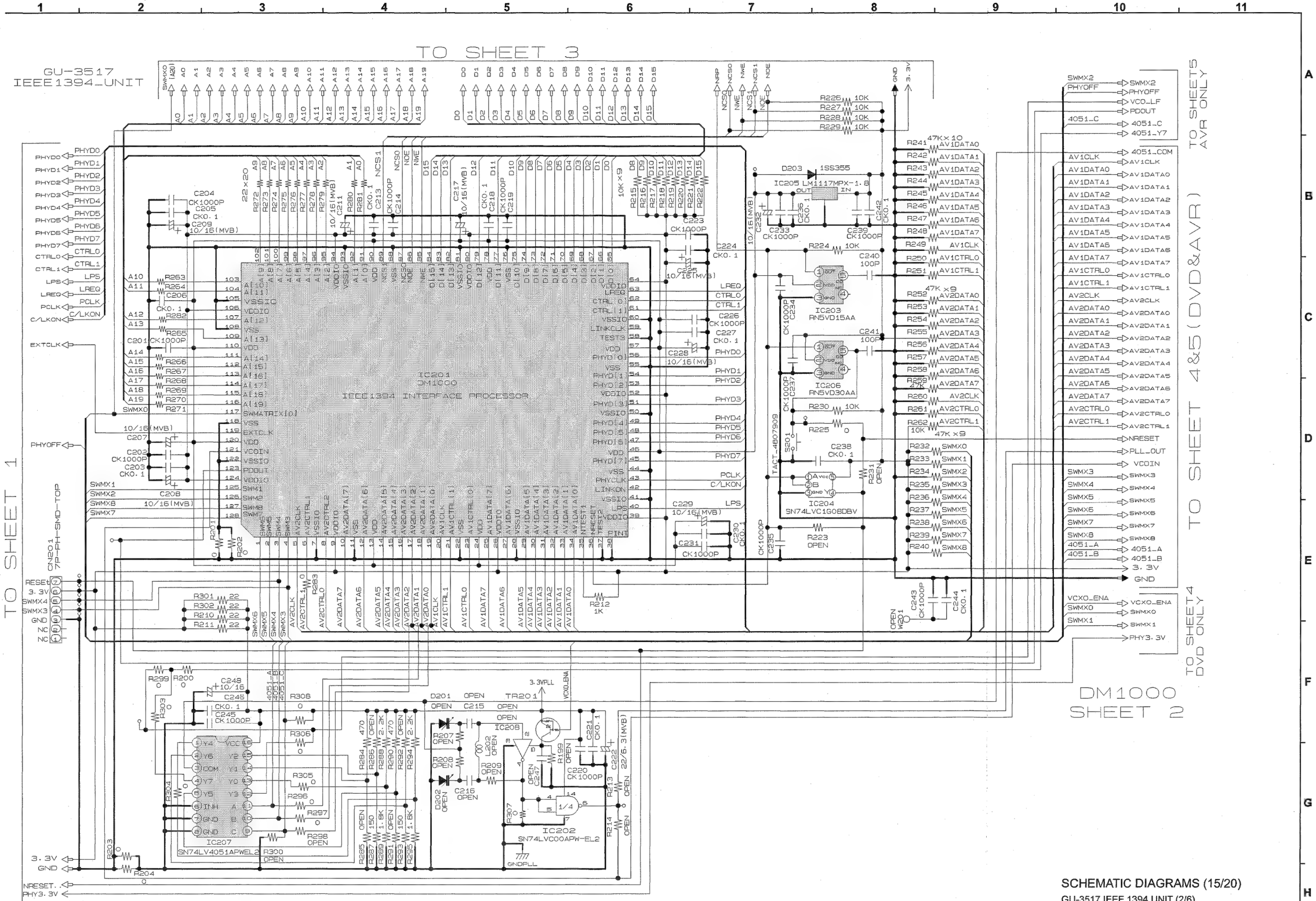
PHY SHEET 1

TO SHEET 2

SCHEMATIC DIAGRAMS (14/20)

GU-3517 IEEE 1394 UNIT (1/6)

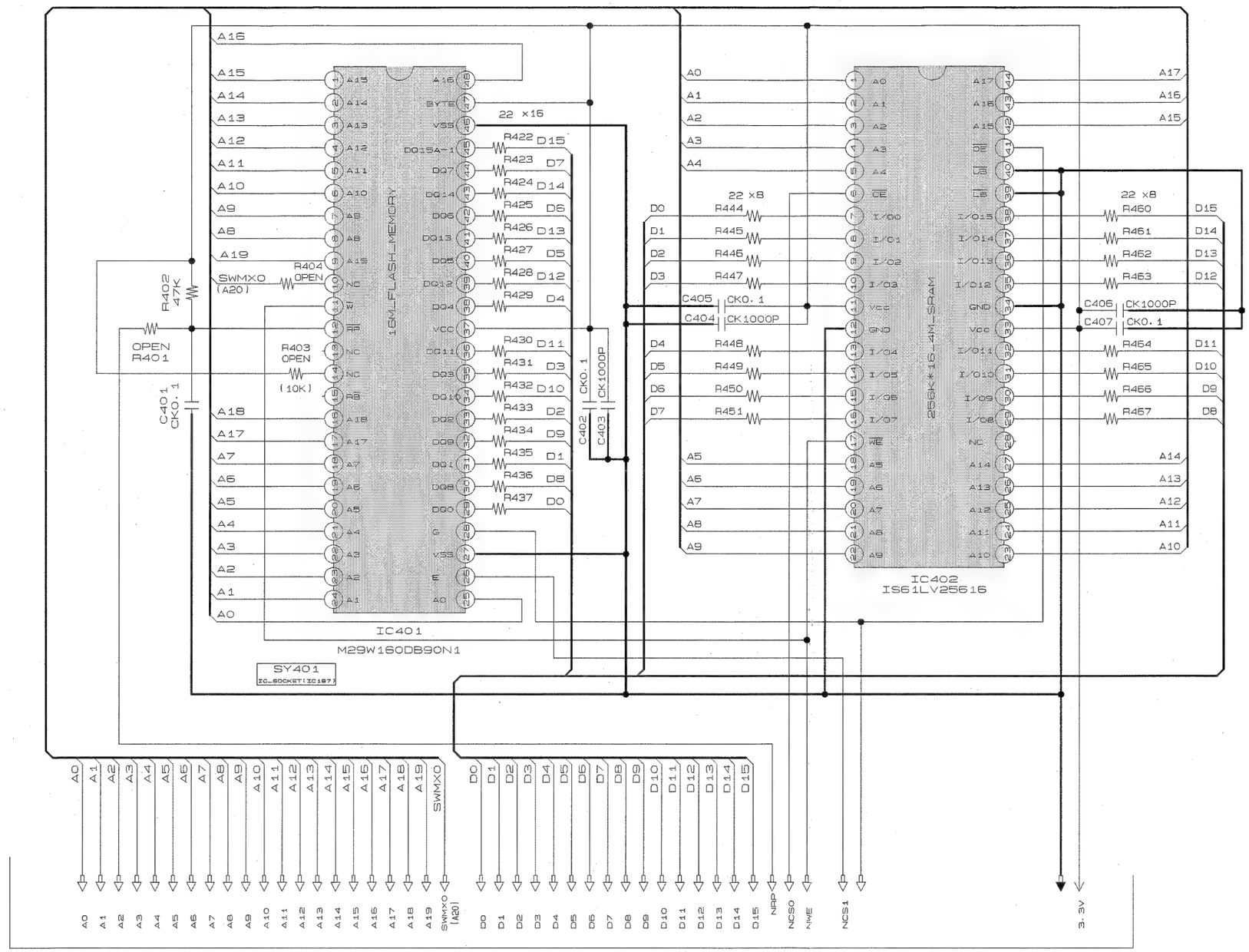
(For Japan model)



SCHEMATIC DIAGRAMS (15/20)

GU-3517 IEEE 1394 UNIT (2/6)

(For Japan model)



TO SHEET NO. 2

GU-3517
IEEE1394_UNIT

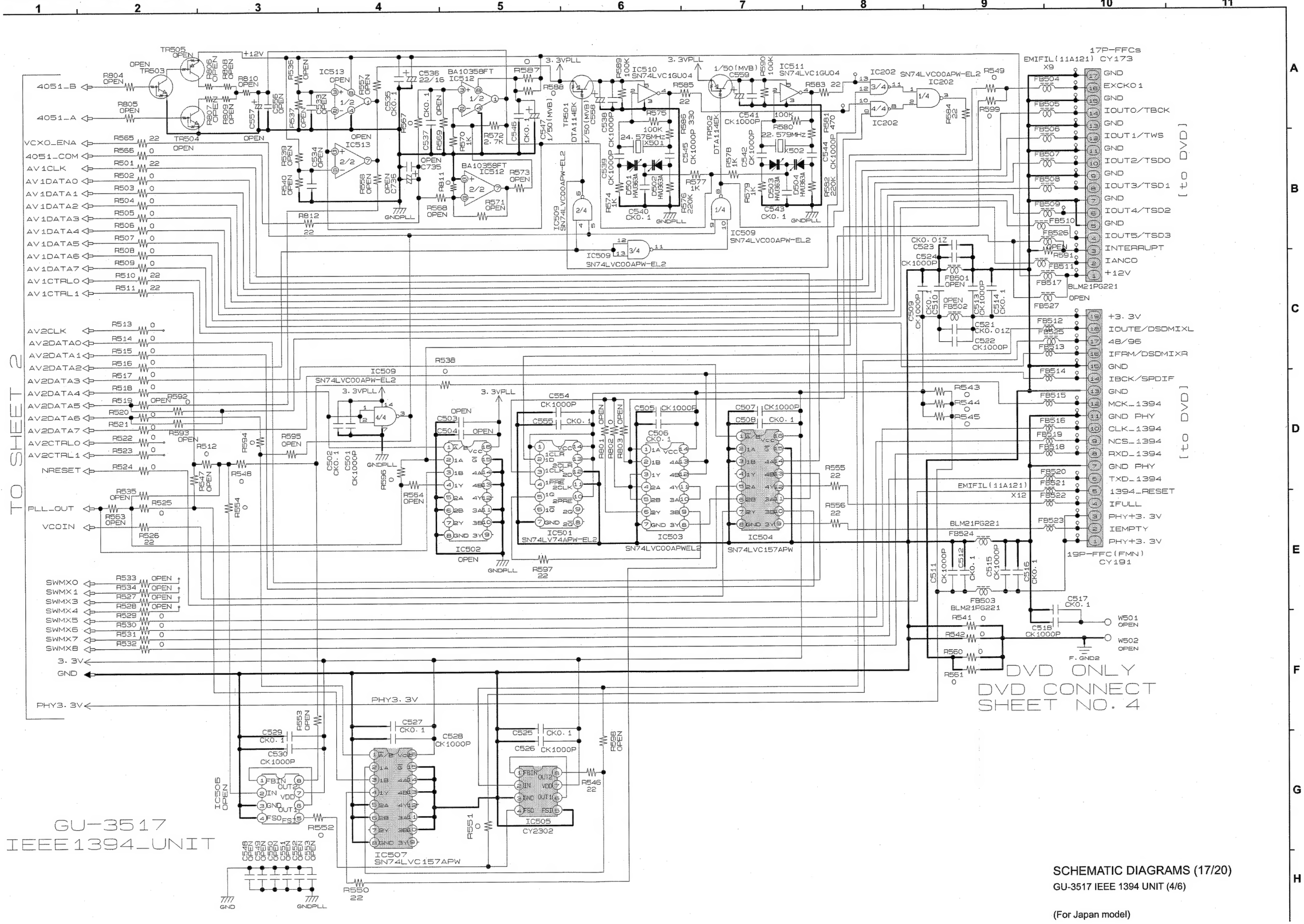
DM1000 ROM
SHEET NO. 3

SCHEMATIC DIAGRAMS (16/20)

GU-3517 IEEE 1394 UNIT (3/6)

(For Japan model)

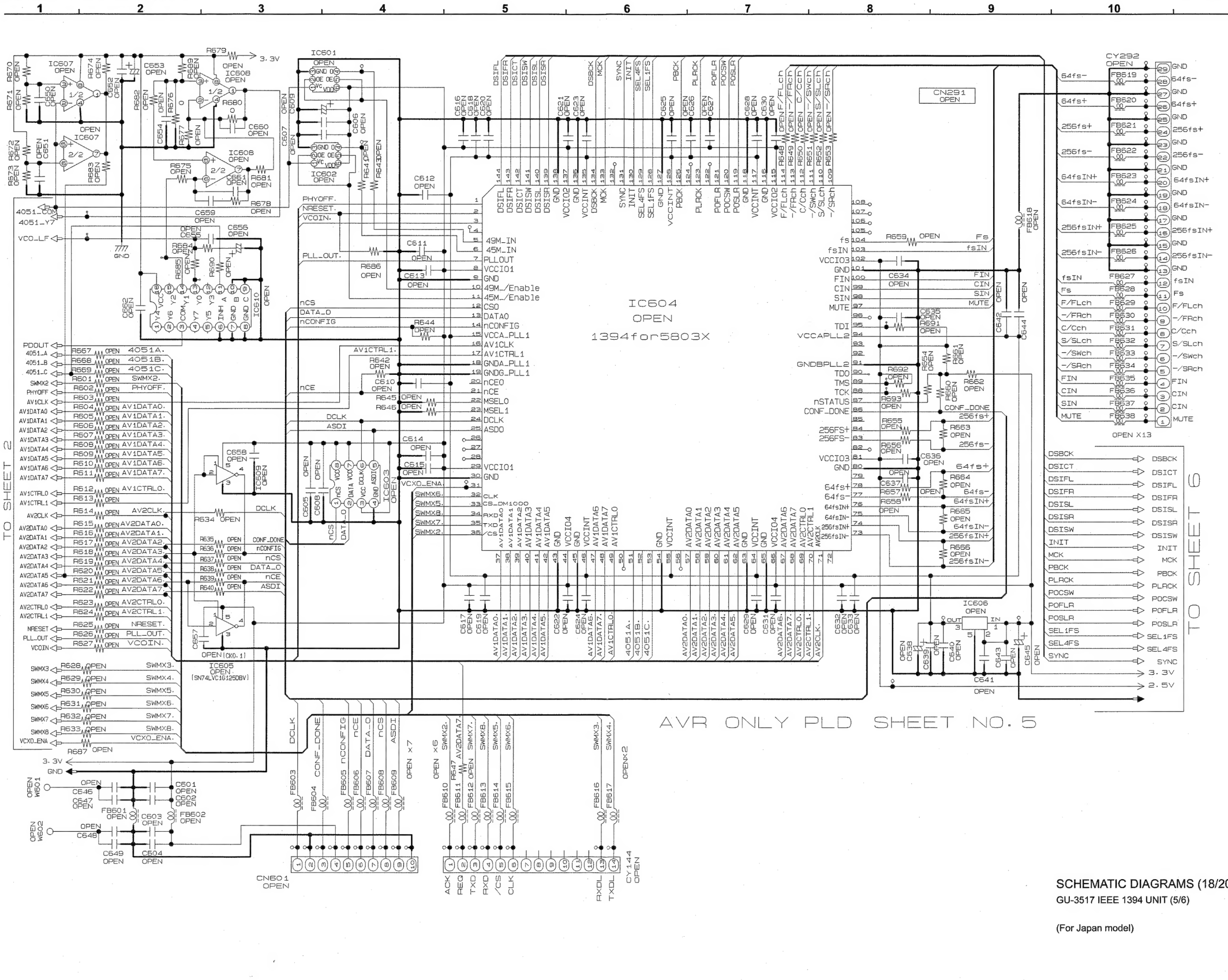
SCHEMATIC DIAGRAMS (17/20)



SCHEMATIC DIAGRAMS (17/20)

GU-3517 IEEE 1394 UNIT (4/6)

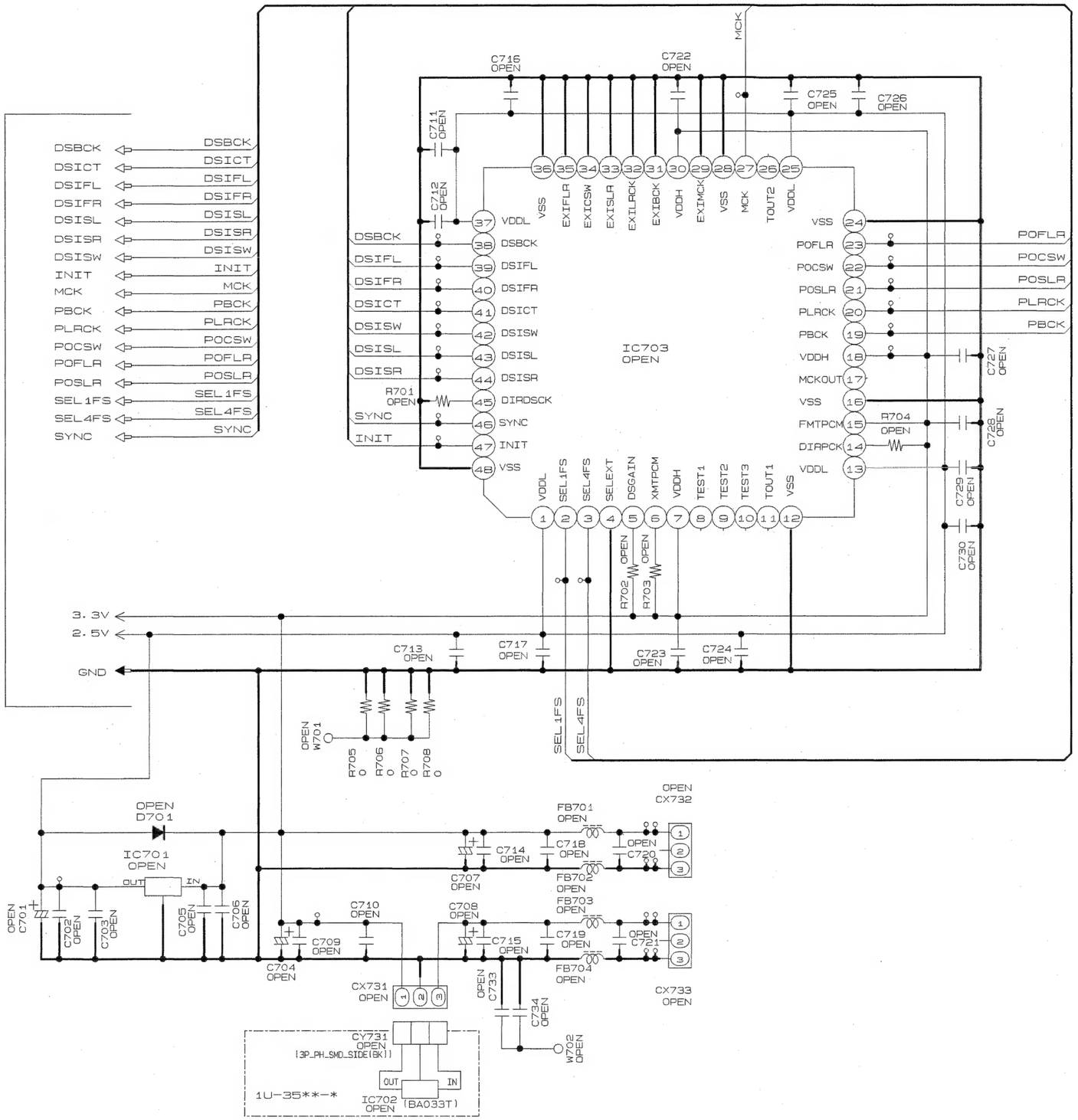
(For Japan model)



SCHEMATIC DIAGRAMS (18/20)

GU-3517 IEEE 1394 UNIT (5/6)

(For Japan model)



GU-3517
IEEE1394_UNIT

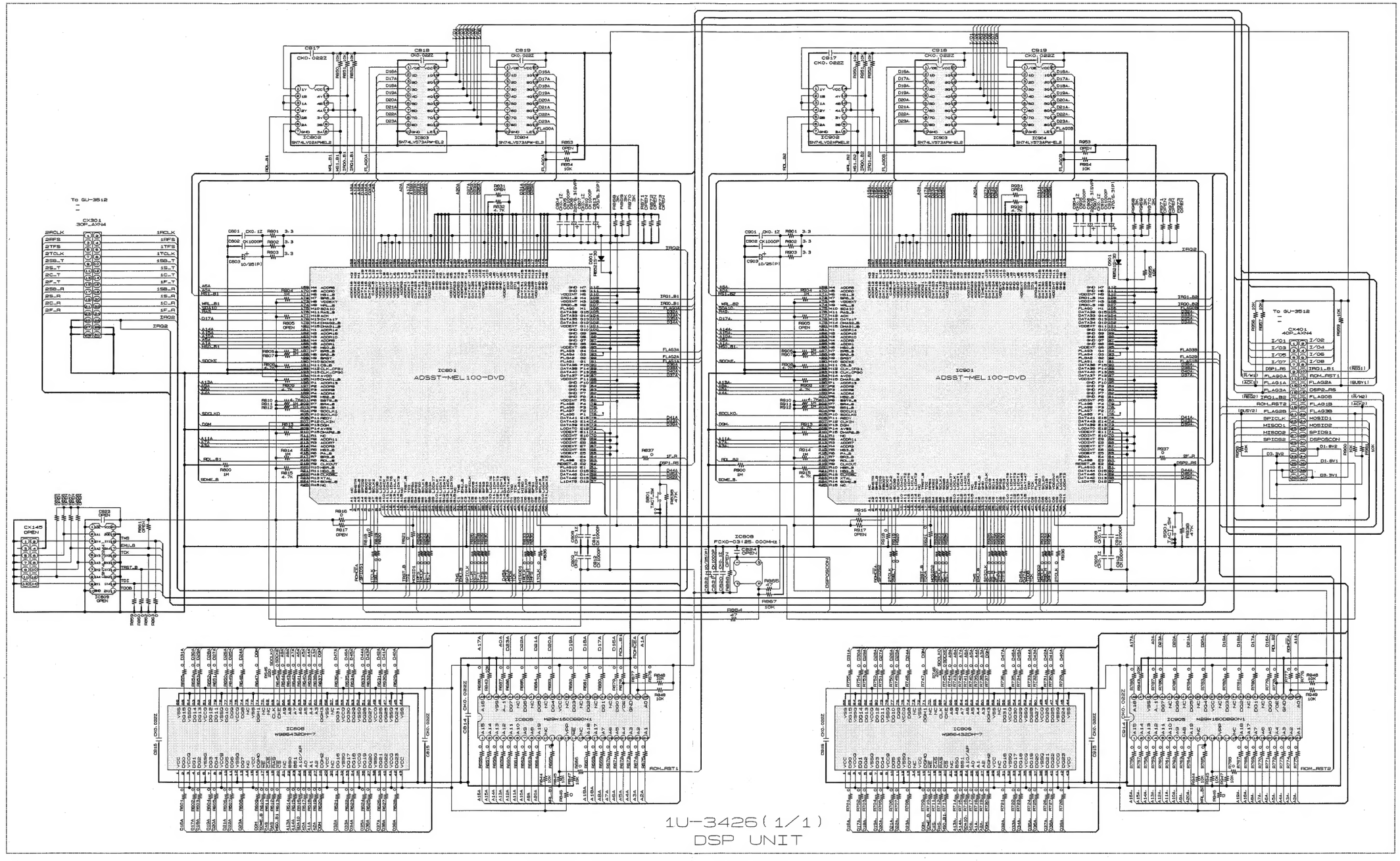
AVR ONLY

DSD TO PCM
SHEET NO. 6

SCHEMATIC DIAGRAMS (19/20)

GU-3517 IEEE 1394 UNIT (6/6)

(For Japan model)



SCHEMATIC DIAGRAMS (20/20)

GU-3426 DSP UNIT

(For Japan model)